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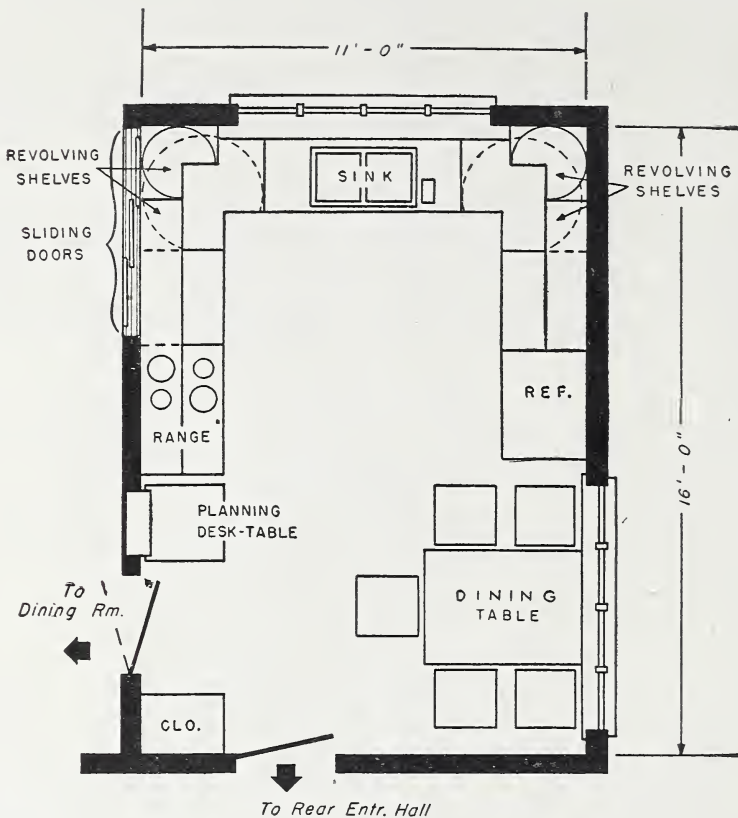
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# *a Step-saving* **U Kitchen**



UNITED STATES DEPARTMENT OF AGRICULTURE

Miscellaneous Publication No. 646



## Points On Construction

- Working drawings are available from the extension agricultural engineer at most State agricultural colleges. In some States, county extension agents will place your order.
- If working drawings are not available in your State, write to Housing and Household Equipment Division, Bureau of Human Nutrition and Home Economics, United States Department of Agriculture, Beltsville, Md. This office cannot supply the plans, but will direct you to a State that handles them.
- Working drawings are detailed, so that a local carpenter or cabinetmaker can reproduce them easily.
- If your storage needs are greater than those of the average family, you may wish to increase the size of certain units. Do not decrease the size of units. The space allotments needed for individual utensils and supplies have been carefully planned to allow ample room for removing articles.

**HOUSE-DRESS NOTE :** The young women pictured at work in this kitchen wear functional house dresses designed in the Bureau's laboratories.

# *A Step - Saving U Kitchen*

Designed by

Lenore Sater Thye, housing specialist. Plans by J. Robert Dodge, architect

■ Maximum convenience for the homemaker at her work is the aim of this step-saving kitchen, planned primarily for the farm home. It was designed in housing and household equipment laboratories of the Bureau of Human Nutrition and Home Economics.

**Basic plan.**—The unbroken U shape was chosen for arranging equipment because it forms a compact dead-end work center through which household traffic cannot pass. It also allows the dining corner to be planned and decorated as a separate center.

As shown on the plan (opposite), the three key pieces of equipment are brought within easy reach of each other—sink at center of U, refrigerator and range at ends. Other arrangements of these pieces in a U or an L might be equally convenient.

The U as shown here, while compact, is large enough to give two women comfortable working space. There is also ample storage to accompany the activities usually carried on in a farm kitchen when there is a separate laundry and workroom.

**Smooth production line.**—This kitchen is planned to cut walking, stooping, and stretching to a minimum in accordance with modern work-simplification ideas. It is planned so jobs can progress smoothly from one work center to the next. The production line is from right to left, as preferred by most right-handed women.

**Comfortable work heights.**—Counters are 36 inches from the floor—the height used by manufacturers for most cabinet counters and gas and electric ranges. If this height is not comfortable, it can be adjusted an inch or two by changing the height of the toe space. The pull-out lapboard has a top 26 inches from the floor. Tests show that this is a comfortable level for seated work.

**Handy storage.**—To save time and energy, storage is provided for supplies and equipment near the places where they are first used. Articles in constant use are near at hand; those seldom used are farthest off. Cabinets have been designed especially to hold the various kinds of kitchen articles.

Corner space in cupboards and on counters is often wasted, for it is hard to reach. Revolving cupboards in corners of the U are a good solution.

**Light and air.**—A broad window over the sink and its counters and another in the dining corner provide good natural light and cross ventilation. A fan built in the wall above the refrigerator helps to ventilate and carry off cooking odors.

Semi-indirect artificial light illuminates the work surfaces with a minimum of glare and shadow. The fixture is a U-shaped wooden trough with four 40-watt fluorescent tubular bulbs mounted on it. The dining corner has a semi-indirect incandescent fixture.

# Mixing Center

Mixing jobs go quickly when supplies and utensils are within easy reach and the work space is adequate, as in this mixing center. The refrigerator is conveniently placed at the right end of the work counter.

Corner cupboards with revolving shelves above and below counter level tie in with the mixing center.



■ **Generous counter space.**—Of all food-preparation jobs, making cookies and bread requires the most counter space. Allowing for this, a mixing counter should be at least 36 inches long, with 42 inches more desirable, the Bureau's research has shown. In this kitchen 44 inches is provided.

**Double-deck flour bins.**—Keeping flour handy is a problem in farm kitchens where much baking is done. In this kitchen, replenishing the small container is easy.

A small metal bin above the mixing counter replaces the flour canister, which usually takes up counter space.

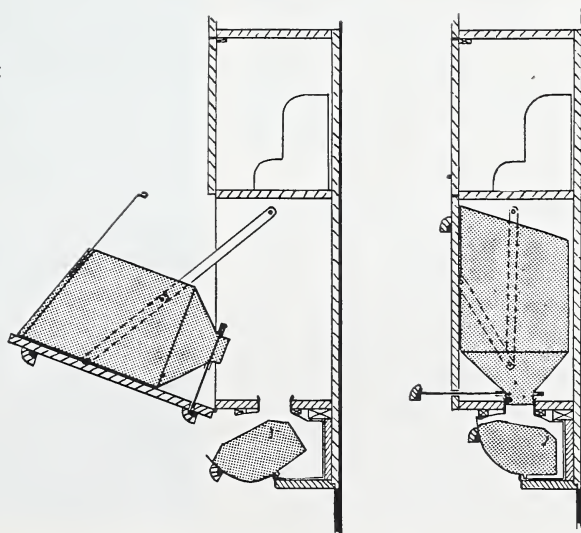
Directly above is a big bin for about 40 pounds of flour. Pull out a metal shutter in the bottom of the big bin . . . and flour feeds into the small bin just below.

**More bins in a row.**—Next to the small bin is a bin for granulated sugar, and beyond is one for other sugar, meal, or flour. The small bins are removable for easy cleaning.

**Right-corner Lazy Susan.**—The wall cupboard with revolving shelves at right bend of the U is part of the mixing center. It is big enough so that staples in daily use can occupy the outer part of the shelves and yet leave



Double-deck  
flour bins



room near the center for reserves. These shelves are extended down to the counter, providing storage at working level for the heaviest and most often-used staples.

The base revolving cupboard is for the larger mixing bowls, baking utensils not stored elsewhere, a large jug of vinegar, saucepans. The top three-quarter shelf is just right for storing saucepans with long handles. The toe-board under the corner base cabinets is removable, to allow for brushing out under the shelves.

**Utensils above mixing counter.**—Since the Lazy Susan holds the many staples used at the mixing center, cupboards above the counter are left for equipment and supplies usually stored below the counter or in more out-of-the-way places.

The wall cabinet above the mixing center has shelves for mixing bowls, measuring spoons and cups, casseroles, custard cups. The top shelf is fitted with dividers to file the pie, cake, muffin, and bread pans, and similar pieces. Above the big flour bin, is a small vertical file for such articles as the pudding pan, tube cakepan, salad mold.

**Recipes at eye level.**—A rack inside the right-hand door of the wall cabinet (shown at right) holds a recipe card or an open cookbook.

**Pull-out boards that lock.**—The two pull-out boards under the mixing counter lock into place, and can be pushed back when the gravity stop under the board is released. The smaller board makes a sturdy base for attaching a food grinder. It also is handy for chopping small quantities of vegetables. The larger board is for use with larger quantities of food.

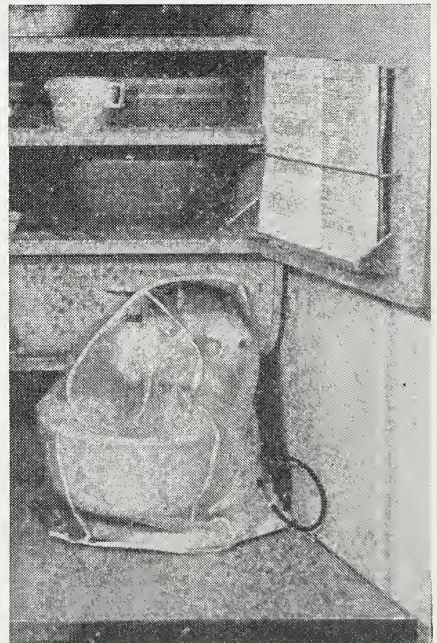
**Drawers close to counter.**—Below the pull-out boards are three drawers: One just deep enough for spoons, spatulas, and other mixing tools; a slightly deeper drawer for such things as a hand egg beater, can opener, graters; a deep drawer for refrigerator dishes and covers. All of these drawers can be opened without stooping.

**A place for seated work.**—A pull-out lapboard, shown on page 16, is included in this center.

**Lower drawers.**—Below the lapboard are two tiers of drawers, with two drawers in each tier:

*Left tier:* Top drawer for the children's lunch-basket supplies, and picnic things. Bottom drawer for seldom-used odds and ends of equipment, which most kitchens inevitably include.

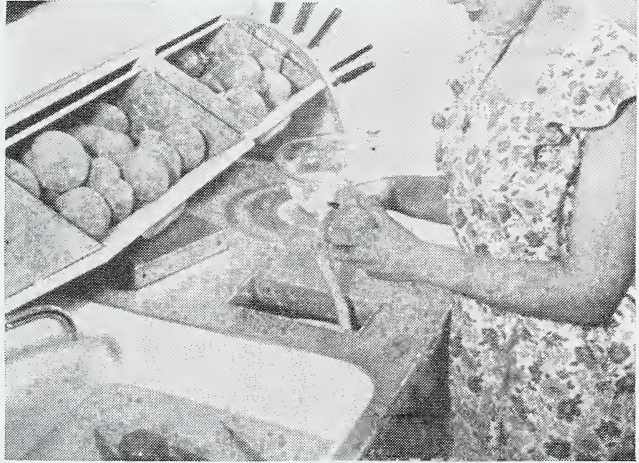
*Right tier:* Top drawer for recipe books. Bottom drawer has dividers for filing large, seldom-used baking utensils.





# Vegetable- Preparation Center

A step-saving set-up for preparing vegetables or for scraping dishes. Vegetable bins and knife rack near counter level. Garbage hatch in counter. Utensil cupboard at right.



## ■ Bins for vegetables and fruit.—

The counter for preparing vegetables and scraping and stacking used dishes need not be so wide, front to back, as a mixing counter. By taking off 3 inches and using as much depth as possible in the outside wall, four bins are built under the windows.

The big bin at the vegetable-preparation counter holds about 20 pounds of potatoes. Next is a 10-pound bin for onions. Similar bins to left of sink are for other vegetables and fruit.

Made of metal and wood, the bins are easily removed for cleaning. The metal-lined compartments into which they fit are also easy to clean.

**Garbage short-cut.**—In this step-saving kitchen it is no trouble to save garbage for hogs—a problem chore in many farm households.

Common practice is to peel vegetables and fruit into a pan or sink

strainer . . . then pour the peelings into a garbage pail . . . then stoop to put pail under sink, or lift it to a table where it takes up work space.

Here, the garbage pail is in a metal-lined compartment under the counter at right of sink. Vegetables and fruit can be peeled—and plates scraped—directly into the pail through an oblong opening in the counter. Counter opening and lid are metal-lined for easy cleaning.

The filled pail can be removed from the yard side through an insulated door in the back wall. The pail can be taken out to be washed, through a door opening on the kitchen side.

**For tools and paper.**—Below the garbage compartment are two drawers. The shallow top drawer is for hammer, pliers, nails, and so on. The deep bottom drawer is a file for paper sacks and wrapping paper.



Cleared dishes progress to the left: Washed in shallow sink bowl . . . drained

## *Dishwashing Center*

❏ **Two-level sink.**—The sink for this kitchen was designed and constructed in the laboratory. No sinks like it are on the market.

The right bowl, 5 inches deep, permits dishwashing at a comfortable height. In so shallow a bowl, the drain must be directly under the faucet to prevent excessive splashing from running water.

The left bowl, 8 inches deep, is convenient for draining dishes or washing

vegetables. The sink is wide enough, front to back, for a medium-sized dish drainer to rest on the rims, supported well above the sink floor. Space at side of the drainer allows liquids to be poured down the sink or pans to be emptied without contact with the draining dishes.

**For cleaning supplies.**—A wall compartment at the back of the sink is for soap, brushes, and scouring and



in deep bowl . . . everyday dishes and silver stored near counter level.

soap powders. A compartment under the sink, shown on page 10, holds extra cleaning supplies.

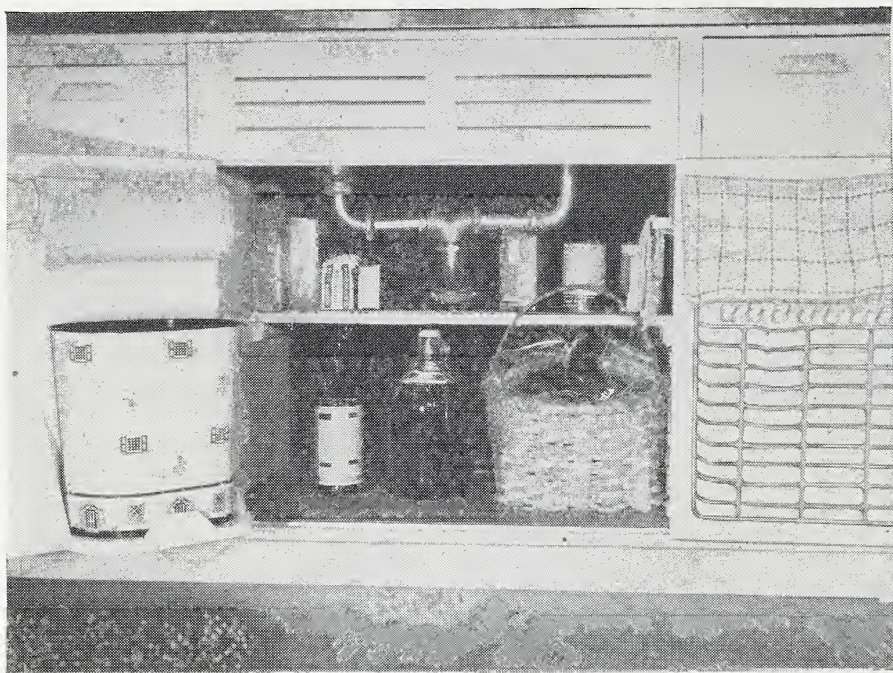
**Four drawers.**—Below the counter at left of the sink are four drawers—for tea towels, for cake and cookies (a metal-lined drawer), for aprons, and for miscellaneous articles.

**Left-corner Lazy Susan.**—At the left bend of the U, a wall cupboard with revolving shelves is for everyday dishes. Heavy dishes and those most often used are on the lowest shelves. The top shelf is for ready-to-eat cereals. Steps

are saved when cereal and bowls are in one cupboard.

The revolving shelves below hold skillets, roaster, and other utensils used at the range. Shelves and openings are large enough to take, in addition, big pieces of equipment such as the pressure canner.

A large coffeepot is here, as well as the percolator used daily, and also the coffee—all handy to the cold water at the sink. If a hot-water coffee maker is used, a shelf over the range gives more convenient storage for coffee and coffee maker.



■ **Under-sink storage.**—The storage compartment under the sink provides a place for temporary storage of empty cans, jars, and bottles, as well as for extra cleaning supplies.

The wastepaper basket is mounted on the left door of the under-sink cupboard; also a roll of paper towels. On the right door are hooks for the dish drainer and a rack for the dish-cloth.

■ **Tea-towel pull-out rack.**—

A pull-out rack at the right of the range is for drying tea towels.

To meet safety requirements, there is asbestos board on the side of the rack next to the range. To ventilate the rack, the asbestos board and the toeboard are both perforated.



# Cooking Center

■ **Shelves at range.**—Shallow open shelves are provided for foods in frequent use at the range.

The lower shelf is for such supplies as flour, sugar, salt, pepper, tea, cocoa. The upper, for such staples as breakfast cereals that require cooking, rice and corn meal.

These shelves extend only a little way over the range, but, even so, for safety's sake there is asbestos lining under them.

**Cabinet above.**—The wall cabinet is 24 inches above the range. The

lowest shelf allows just enough space for meat platters. The shelf above is mostly a vertical file for pot lids and vegetable dishes. This leaves one-fourth of the shelf for additional staples used at the range. The top shelf is for extra packages of all foods stored at the range, and for dry breakfast cereal reserves.

**Double-fold doors.**—The cabinet above the range, and also the cabinet above the serving counter, have double-fold doors, hinged to fold back flat for convenience and safety.

Shelves and cupboards over the range save many steps. They should be protected from fire hazard by asbestos board under them.





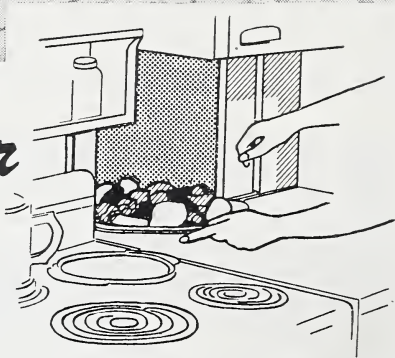
## Serving Center

■ The serving counter is next to the range and handy to the dining corner.

**Sliding doors.**—To speed dining-room service and save many steps, sliding doors (shown at right) are back of the serving counter. When these doors are opened, dishes may be taken from the wall cupboards on the dining-room side. The doors also open up a passway through which food is served from the kitchen counter to the dining-room sideboard.

**For company dishes.**—Above the serving counter is a 44-inch cabinet for storing good dishes. Farm families usually serve in family style. So space is allowed here, near the range, for meat platters and vegetable dishes of the company set.

**For silver and such.**—Four small drawers under the right end of the long



wall cabinet are for articles used when setting the table for everyday meals—silver, table hot pads, paper napkins.

**Under the serving counter.**—The base cabinet is fitted with—

- A large bread board . . .
- A drawer for small utensils used at the range: Meat forks, basting spoons, potato masher, other pieces . . .
- A metal-lined bread box big enough for four loaves and a pan or two of rolls . . .
- A file cupboard for trays, cooling racks, turkey platter, other large items conveniently stored upright.

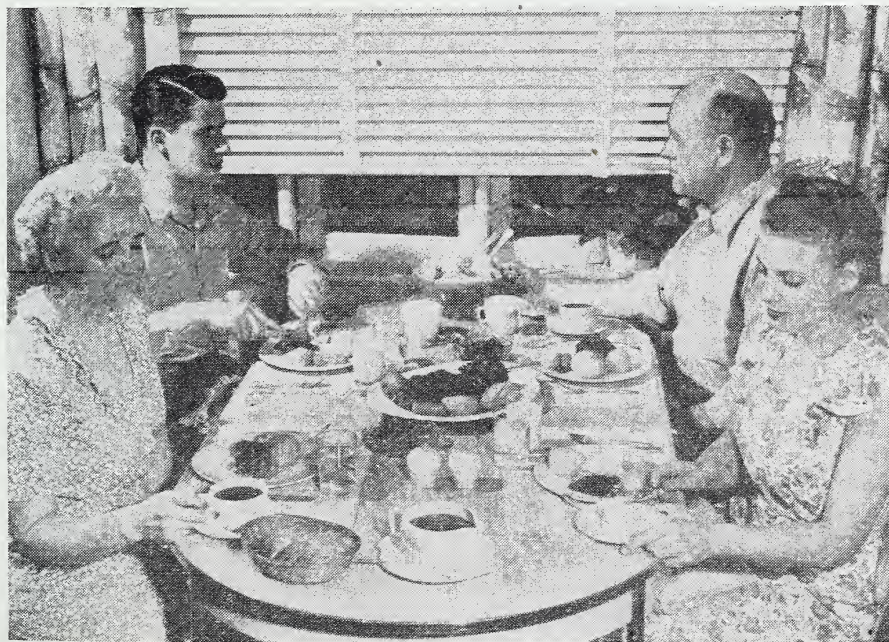
# Dining Corner

■ The dining corner is large enough to seat six comfortably. With the table pushed to one side of the dining area or set with the long side against the window, there is room for a baby's play pen.

A 6-foot window looks out on the yard and drive. It also provides for cross ventilation with the window over the sink. Harmonizing colors of curtains, walls, and dishes help make the corner cheerful and attractive.

Under the window a radiator is flanked by open shelves where the toaster and waffle iron may be kept. There is room here for magazines and books at left and children's toys at the right. The top shelf provides a place for potted plants or flowers and also serves as a counter for convenient use of electrical equipment. Convenience outlets directly below eliminate reaching or stooping to make connections.

**Dining corner, large enough for chairs rather than benches. There is ample space for pushing back chair and passing behind seated person.**





## Planning Center

■ A useful step saver is a desk at which to plan meals, telephone, and make out market orders. This kitchen desk is a drop-leaf table on casters. A shallow drawer holds pencils, pads, grocery bills. Placed next to the cooking center, the desk provides a convenient place to work while the meal is cooking.

**Desk used as table.**—With leaves raised, the desk makes a 48-inch table. It can be easily moved where wanted for use in food preservation or for setting up salads or desserts when serving a group. It can also serve as a tea

cart, or it will seat two extra persons comfortably for meals.

With a fluorescent light directly overhead, the table is a good place for a child to study.

**Wall shelf.**—A 6-inch-deep shelf extends back into the wall, making a place for a recipe book or two, telephone book, a kitchen radio.

**Mirror for last look.**—Homemakers say that when someone is at the door or when they join guests they like to see that they are presentable. A mirror above the desk meets this need.

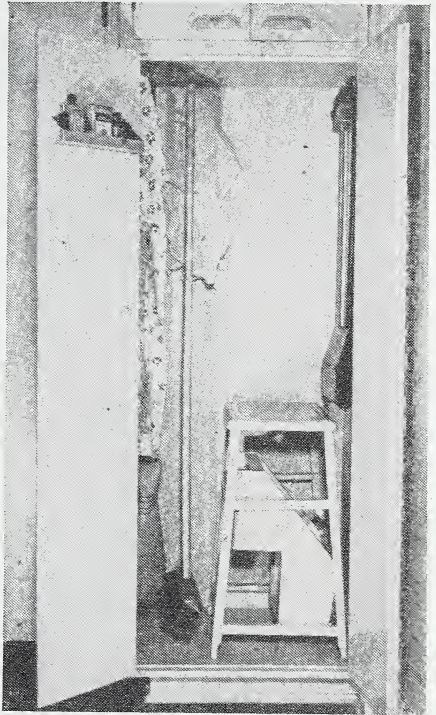


# Storage Features

■ **Storage closet.**—Near the doors and out of the way of meal preparation is this closet for the kitchen cleaning equipment. Besides such things as broom, brushes, and dustpan, the lower section can hold the step stool. There is a hook for aprons. A rack on the door provides storage for first-aid supplies.

The upper section is reserved for a selected supply of canned foods—saving trips to food-storage room.

**Revolving shelves.** — Revolving corner-cabinet shelves turn easily and smoothly on a ball-bearing pivot. To keep them from turning, a catch placed beyond the reach of young children is a wise precaution against accidents. A metal rim keeps utensils from sliding off the shelves.





## Pull-Out Board

■ The pull-out lapboard in the food-preparation center provides a comfortable place to sit for long and tiresome jobs, such as making sandwiches, shelling peas, or preparing foods for canning and freezing. It is planned for use with a kitchen chair which allows the worker to sit comfortably, with a good back rest and with her feet flat on the floor. Food supplies and utensils taken out for use can be placed on the counter above within easy reach.

BUREAU OF HUMAN NUTRITION AND HOME ECONOMICS  
Agricultural Research Administration  
United States Department of Agriculture

Washington, D. C.

Issued March 1948  
Slightly revised April 1949

