L-920

KITCHEN PLANNING

CHERIE JAN SLABAUGH*

KITCHEN WORK CENTERS

Extensive research has gone into planning kitchens that are efficient as well as attractive. Studies indicate that there should be five work centers: the refrigerator center for storage of perishable foods; the sink center for cleaning fruits and vegetables, equipment and providing water for cooking operations; the mixing center for preparing foods; the cooking center for cooking foods; and the serving center for storing items that go directly from storage to the table.

The design of these five centers and the sequence in which they are placed determine efficiency of the plan and energy expended in everyday tasks. Each work center should have adjacent counter and cabinet space to provide convenient working area and ample storage nearby.

The Refrigerator Center

The refrigerator center usually is near the outside entrance and can be first or last in the work sequence. "Time and motion" studies show that refrigerator-to-range travel is more frequent than that of refrigerator-to-sink. In addition to the refrigerator, usually 36 inches wide, this center should have:

A counter at least 18 inches wide and about 36 inches high on the open side of the refrigerator.

Wall cabinets to hold dishes used in storing and serving refrigerated foods.

A base cabinet with drawers for refrigerator supplies, such as bottles and bottle openers.

The Sink Center

Because of so many activities within the sink area, this center is most desirable when it is near or between the cooking and mixing centers. An efficient center has:

Counters on both sides, 30 inches on the left and 36 inches on the right.

A sink, either 30 inches double or 24 inches single, depending on the individual and available facilities. Two separate sink compartments with a garbage disposal between the two are especially convenient.

A dishwasher, 24 to 36 inches, is most convenient when on the left of the sink, but location of dish storage is a factor to consider. This storage unit requires 24 to 36 inches also.

Cabinet space for utensils, nonrefrigerated vegetables and cleaning equipment used first at the sink.

Waste receptacle for cans and paper.

A light over the sink and in front of the line of work.

The Mixing Center

The mixing center can be between the sink and the refrigerator or next to the stove. It should have:

A counter at least 42 inches wide. In contrast to the standard 36 inches high, a counter $28\frac{1}{2}$ to 30 inches high will lessen fatigue.

Wall cabinets to store staples, packaged foods, cookbooks and mixing bowls.

Base cabinets and drawers to store utensils used first in this area.

Good lighting in front of the line of work.

The Cooking Center

This center is planned around the range and is convenient near the sink and mixing centers, as well as the serving center. This area should consist of:

A heat-resistant counter, about 2 feet wide, at least on one side of the cooking units; however, work counters on both sides of cooking units are safety precautions.

A range which can be a single free-standing or console type, or one which has separate units, such as a cooking top, oven, broiler and rotisserie. If

^{*}Extension housing and home furnishings specialist, Texas A&M University.

units are separate, the wall oven should be placed so that the oven rack is aligned with the counter top. This type of oven should not interrupt the flow of counter space.

Wall cabinets for storing utensils and serving equipment used at the range, as well as storage for seasonings, pot holders, knives and spoons.

Base cabinets for storage of larger, heavier items. Ventilation by a quiet exhaust fan over the cooking surface.

Good lighting in front of the line of work.

The Serving Center

This center often is integrated with the cooking or refrigerator center; however, it should be near the eating area. It should have:

A durable counter at least 24 inches wide.

Cabinet space for storage of linens, glassware, dinnerware and items used first in this area.

Shapes of Kitchens

Most kitchen planning specialists recognize four basic plans for work areas: U-shape, L-shape, twowall or corridor and one-wall.

In the first three plans, essential pieces of equipment—range, refrigerator and stove—should be placed at points on an equilateral triangle. A distance of 4 to 6 feet between the sink and the range (measured at a distance from center fronts of appliances, 4 to 7 feet between sink and refrigerator and 4 to 9 feet between refrigerator and range is recommended.

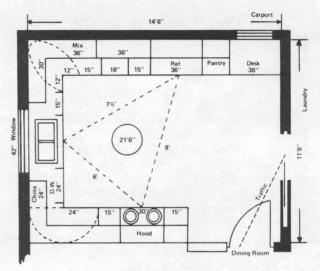
The total distance between all three appliances should be 15 to 23 feet and never more than 26 feet

U-Shaped Kitchen

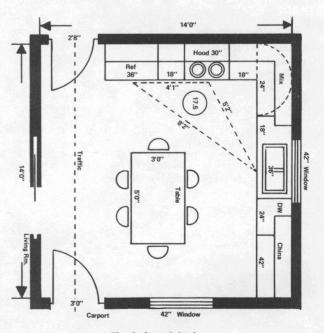
The U-shaped kitchen is considered the most desirable plan because it diverts traffic and brings together continuous counter space. The sink is usually at the base of the "U" with the refrigerator on one arm and the range on the other. One arm of the U-shape can serve as a cabinet divider and may include an eating counter.

L-Shaped Kitchen

In the L-shaped kitchen, there is often less distance between the centers, leaving more space on the free side of the room for eating or extra storage. This plan allows for some traffic control and is one of the easiest to arrange when remodeling. However, it is less efficient than the U-shaped plan.



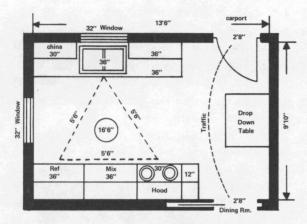
The U-shaped kitchen.



The L-shaped kitchen.

Corridor Kitchen

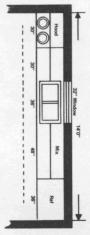
The corridor plan puts work centers along opposite walls, decreasing the distance between them. One major disadvantage of this plan is the constant traffic through the centers if there are doors at both ends or an eating area at the closed end.



The corridor kitchen.

One-Wall Kitchen

This plan is the least desirable since it is impossible to use the triangle placement; therefore, the centers should be grouped in sequence with the refrigerator-mix center near the service door.



The one-wall kitchen.

MATERIALS USED IN THE KITCHEN

Floor Coverings

There are several major factors to consider in selecting a kitchen floor covering. It should resist wear, stains, solvents, grease and moisture. It should also be resilient under foot, quiet, nonslippery, easy to clean, pleasing to the eye and recommended for long wear. Some desirable floor coverings are made of vinyl, inlaid linoleum and vinyl asbestos. In some situations, rubber tile, ceramic tile and easy-care kitchen carpeting are satisfactory. Since maintenance is a key factor in the selection of a floor covering, it is important to note that a medium color with some pattern or design is easiest to keep clean and fresh looking. No floor covering is best for every situation. Choose the best quality within the price range you can afford.

Wall Coverings

Wall covering should be soil and moisture resistant and easy to maintain. Wall coverings may be of paint, ceramic tile, glass tile, washable wall fabrics and wood paneling. Ceilings painted offwhite or a light color will give maximum light reflection.

Counter Tops

Counter tops must offer ease of care, durability and resistance to stains, burns and moisture, in addition to being attractive. Such diversity in performance requires a combination of materials. Flexible vinyls and laminated plastics, available in many colors and patterns at various prices, are widely used. Other materials, sometimes chosen for specific purposes but more expensive, are wood, stainless steel, ceramic tile and marble.

CHECK POINTS IN KITCHEN PLANNING

- 1. Are doors located to eliminate traffic through work areas?
- 2. Are doors hung to avoid interference with equipment and work areas?
- Are doors and windows located to provide cross ventilation?
- 4. Is there an exhaust fan directly over the range? (A distance of 24 to 30 inches above the cooking unit is good.)
- 5. Are walls smooth and light?
- 6. Is there illumination at each work area, as well as central lighting?
- 7. Are there adequate outlets installed at location for small and large appliances?
- 8. Are there provisions for storing staple foods, in addition to storing space at the work centers?

- 9. Is the total length of base cabinets 11 or more feet? (Cabinet length less than 8 feet 6 inches does not provide adequate work and storage space.)
- 10. Is the total length of wall cabinet fronts, not counting those over range and refrigerator, 8 feet 6 inches or more? (Less than 5 feet does not provide adequate storage.)
- 11. Is the total length of the *counter* at the front edge, not counting the sink, over 8 feet 6 inches? (Less than 6 feet 6 inches will not give adequate working space.)
- 12. Is there a work triangle between center fronts of the sink, range and refrigerator? (If so, a total distance of all three points from 15 to 23 feet is good. Less than 12 feet creates crowdedness and more than 26 feet causes unnecessary steps.)
- 13. Is there a counter at least 18 inches long on each side of the sink, on at least one side of the range and on the opening side of the refrigerator?
- 14. Is the distance between cabinets located opposite each other 4 feet 6 inches or over?

- 15. Are cabinet shelves adjustable so they can accommodate different heights of kitchen equipment?
- 16. Are there drawers *below* the work surface for storage of spoons, beaters, knives and other small equipment?
- 17. Is there space for eating in the kitchen?
- 18. Can you see someone approaching the house from the kitchen?
- 19. Is the kitchen attractive?
- 20. Is it partially open to the dining area, for sociability as well as convenience in serving?
- 21. If so, can it be closed off completely when you want to entertain formally?
- 22. Is it convenient to the carport, as well as the front door?
- 23. Can you watch children playing both outdoors and indoors?
- 24. Can you go from the kitchen to the bedrooms without passing through the living room or dining room?
- 25. Is the window area at least 10 percent of the floor area? (15 to 20 percent is better.)

References

Peet, Louise Jenison and Thye, Lenore Sater; *Household Equipment;* New York: John Wiley & Sons, Inc.; 1962, 5th Edition.

Faulkner, Ray & Sarah; Inside Today's Home; New York: Holt, Rinehart and Winston, Inc.; 1968.

Small Homes Council, Mumford House, Circular Bulletins; University of Illinois, Urbana, Illinois.

Seversen, Evelyn; A Kitchen for the 70's; Agricultural Extension Service, University of Arkansas, Division of Agricultural and U.S.D.A. Cooperating.