

A Kitchen Makeover

Making cooking simpler and safer

by Carol Siebert, MS, OTR/L, FAOTA



Preparing and cleaning up after meals and handling groceries can be challenging for stroke survivors. Standard kitchen layouts and appliances require standing, reaching, stooping, pulling and lifting. Items need to be carried from cupboards to counters to refrigerators, stoves and ovens. Pans are often heavy. Working around hot surfaces and handling hot containers can pose dangers. • But the good news is, it's possible to modify your kitchen to make cooking safer and easier. • Kitchen modifications can be as simple as installing low-cost adaptations or as extensive as reconfiguring the floor plan and replacing appliances. Many effective modifications don't cost much and won't cause too much disruption. Some require professionals with special expertise, but many can be implemented by non-professionals or "handypersons."

Common problems and possible solutions

Accessible storage

A standard kitchen design typically requires a person to reach and bend to get to wall-mounted and under-counter cabinets. Storage modifications can improve access and cut down on reaching, bending and lifting when seated or standing.

Removing shelves from under-counter cabinets and replacing them with modular pullout shelves or baskets is a low-cost option. Items can be accessed by opening the cupboard and pulling out the shelf; there is no change to the cabinet's exterior. In wall-mounted cabinets, pull-out baskets and Lazy Susans can make items easier to get if you're standing, but upper shelves may remain inaccessible.

In a pantry, place most-often-used items on the shelves that are 30 to 54 inches off the floor. Pullout baskets and Lazy Susans can make these shelves even more accessible. If you don't have a pantry, you can buy a five- to six-foot tall utility cabinet to use as one. Another option is an Autopantries, an automated vertical storage carousel that can be installed in a pantry or cabinet space. A pushbutton control moves the storage shelves to make items accessible.



A survivor enjoys the convenience of the AutoPantry

Cooking and baking

Cooking and baking modifications improve access and reduce the risk of touching hot surfaces or heating elements. In most cases, you need to replace old appliances or introduce new ones.



Microwave ovens offer several advantages. They reduce cooking time and allow use of lightweight containers. They also reduce the risks of using hot appliances and monitoring the cooking

process. While microwaves are often used for heating frozen meals, they are also handy for steaming or boiling foods in a non-metal container. Another advantage is that if you need to rest or focus on another aspect of meal preparation, the microwave stops when the timer goes off. This reduces the likelihood of liquids burning off or boiling over in a pot that's left unattended on a stove.

A few tips about microwaves:

Microwaves should be installed at counter height. Over-the-stove installation is increasingly common, but this makes the microwave harder to reach. Reaching up to take things out of the microwave also increases the risk of spilling hot foods. Even if you have an over-the-stove model, consider adding a second microwave on the counter. Be sure there is adequate counter space in front of the microwave to place hot containers, especially if you have limited grasp or use only one hand.

Stoves, ovens and cooktops

Standard stoves/ranges offer limited access to heating elements and controls, especially for seated users. The optimal modification is to replace a stove with a separate cooktop and wall oven. Cooktop units have more accessible controls, usually near the front of the unit. A smooth cooktop is easier to keep clean and lets you slide pans from countertop to burner and back, instead of lifting pans onto and off a burner. If you must work while seated, the cooktop can be installed at desk height (30 to 32 inches) for optimal access. Do not install a cooktop with a knee cutout below. You risk scald injuries if hot liquid spills off the cooktop surface onto your lap.

Wall-mounted ovens can be installed at the height that works best for the user. Wall ovens typically open from the top, which can still block access if you're sitting. Side-opening ovens are available but cost more and require special ordering. Wall-mounted ovens should have a counter area alongside so you can place hot pots on a firm surface

(and not your lap). For side-opening ovens, a pullout shelf installed below the oven provides an accessible surface.

If a wall oven is not an option, consider a countertop oven. Countertop ovens have the capacity for 10- to 12-inch diameter pans, have accessible controls and can be placed where they're most accessible for you.

Refrigerators

Consider configuration when you buy a new refrigerator. There are three common types: side by side, top freezer and bottom freezer. Each offers advantages and disadvantages.

- **Side-by-side** refrigerators are the most accessible, but they must be positioned so that both doors can be opened fully, otherwise access will be limited.
- **Top-freezer** models offer access to the refrigerator for a wheelchair user, but the freezer compartment isn't accessible. If you have trouble balancing when standing, it might be hard to bend and reach into the refrigerator compartment.
- **Bottom-freezer** models offer more access to the refrigerator if you're standing, but people in a wheelchair will have difficulty accessing both the refrigerator and freezer.

Regardless of configuration, adjustable shelves and pullout shelves optimize accessibility while sitting or standing. Consider a door-mounted ice maker/water dispenser to improve access.

Sinks

You can install a single-lever faucet with an integrated pullout spray to make a faucet more accessible. A single-lever control allows one-handed control of water temperature and pressure. The pull-out faucet lets you fill a container on the counter instead of lifting the full container back to counter height.

Sink access is more complex, especially if you must work while seated. One option is to open access under the sink by removing the cabinet doors, cabinet floor and kick plate. This lets you get closer to the sink, but the sink will still be high. The area under the sink should be finished (where the kickplate and cabinet bottom have been removed), and the sink and pipes covered to protect your knees and thighs.



A single-lever pullout faucet in use

If you're the main person using the kitchen and you must be seated, consider lowering the sink. This requires removing the existing sink and sink cabinet and installing a lower one. The installation is completed with a lower, shallower sink, so your knees will still fit under it.

Transporting items

Meal preparation involves gathering items from pantries, cupboards and refrigerators and moving them to counters, sinks, ovens and cooktops. Some items can be placed on the counter and pushed from one area to another. However, in most kitchens, refrigerators, sinks and stoves are along opposite or adjacent walls. If you use a cane, walker or wheelchair, carrying an item may be hard. In larger kitchens, a small cart or trolley will let you gather the items you need, move them to prep and cooking areas, and bring the prepared foods to the table. A cart or trolley is also helpful for carrying groceries into the kitchen and moving them to storage areas.

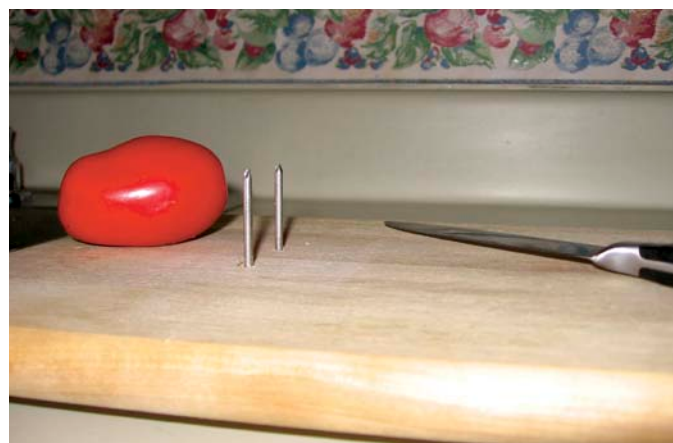
Work/prep area

Working at a counter can be tiring while standing and difficult while sitting. There are several options for creating a seated work area for food prep. Some newer kitchens have pull-out cutting boards/shelves mounted below counter height. These offer a convenient seated work area. In older kitchens, place a large cutting board over an open kitchen drawer, typically the second drawer of a drawer cabinet. This provides a temporary work surface for a seated user. When the task is done, remove the board and close the drawer. If you can't stand for long, consider keeping a stool in the kitchen so you can sit at the counter.

A more expensive, permanent alternative is to replace a section of counter and cabinet with a lower, desk-height counter. This is a practical option for multigenerational households. The low counter is accessible for those who have to sit or to young children, while standing users can work at the standard-height counter.

If you must perform tasks one-handed, a modified cutting board can make chopping and other prep tasks easier and less risky. The spikes in the cutting board stabilize items to be chopped or sliced. The brace on the corner of the cutting board stabilizes slices of bread or similar items so that sandwich fillers can be spread on the bread with one hand.

For many stroke survivors, kitchen modifications can make meal preparation and other kitchen tasks much easier, expanding meal options beyond sandwiches and frozen entrees. How you do it is up to you. Don't want to stir the



Pullout shelves and modified cutting boards are great helpers

pot too much? As appliances need replacing, gradually select new ones with features that better fit your abilities and needs. Ready for a whole new menu of options? Consider an "all at once" remodel, installing new appliances and reconfiguring storage areas and surface heights to create a kitchen that suits your needs. **SC**

Editor's Note: For information on starting a kitchen remodel, visit our Web site, www.strokeassociation.org/strokeconnection.

About the author...

Carol Siebert, MS, OTR/L, FAOTA, is an occupational therapist in Chapel Hill, North Carolina who specializes in home modifications. She is the owner of The Home Remedy, which provides consultation and services to assist individuals to be independent in their homes. Carol has written and presented nationally and internationally on home modifications. She is president of the North Carolina Occupational Therapy Association.