

**Meal Preparation Strategies and Dietary Information to
Help Prevent Recurrent Stroke**

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What is a Recurrent Stroke?

If a person has a prior history of stroke, it increases their risk of having a recurrent stroke in the future. Of nearly 800,000 strokes that occur annually, 23% are recurrent events, and the mortality and disability risks of a secondary stroke is usually higher than the first one (Bailey, 2016). Following a first-time stroke, the estimated risk for stroke recurrence is 13% to 16% within the first year and 4% every year thereafter (Bailey, 2016). Therefore, taking preventive measures to reduce the chances of a secondary stroke is very important.

Strokes can be categorized into two types: ischemic or hemorrhagic. In simple terms, an ischemic stroke is caused by lack of blood flow to the brain as a result of a blood clot or blocked vessel. Contrarily, a hemorrhagic stroke occurs when there is a ruptured blood vessel that causes bleeding inside the brain. The factors that originate the primary stroke are usually the same ones that trigger a recurrent stroke. These determinants are high blood pressure, high cholesterol, diabetes, smoking, obesity, and cardiac abnormalities (How to Prevent a Second Stroke, 2019). Many of these risk factors can be controlled through lifestyle adjustment such as a healthy diet and physical activity. Hence, this resource has been created as a guide for primary stroke survivors on ways they can prepare healthy meals to prevent a secondary stroke. It also provides information on two dietary modifications.

Strategies for Meal Preparation

Adhering to the Dietary Approaches to Stop Hypertension (DASH) and Mediterranean-style diet has shown significant improvement in stroke-related factors (Bailey, 2017). DASH is primarily plant-based diet rich in fruits and vegetables and low-fat dairy with low levels of saturated fat, total fat, and cholesterol (Lo et al., 2016). Mediterranean-style diet contain high amounts of fruits, vegetables, and legumes; moderate amounts of whole grains; and small amounts of red meat (Lo et al., 2016). It also includes fish, nuts, and olive oil to provide healthy fat (Lo et al., 2016).

Nevertheless, sticking to these diets often is not the main challenge for people after a stroke. Due to the physical and cognitive impairment caused by the stroke, preparing the nutritious meal becomes harder than following the actual diet. Therefore, provided below are some strategies for stroke survivors to use during meal preparation from an occupational therapist perspective.

Energy Conservation Technique

Tasks that used to be effortless can seem to take a lot more effort post stroke. This is because after a stroke, our body can become severely weak. Energy conservation techniques can accommodate for this reduced strength. Here are some ways to conserve your energy during cooking and meal prep:

- Cook and bake in steps to reduce energy use (St. Joseph's Healthcare Hamilton, 2013).
- Gather all ingredients and utensils before starting (St. Joseph's Healthcare Hamilton, 2013).
- Make large meals and freeze in servings for later use (St. Joseph's Healthcare Hamilton, 2013).
- Use lightweight cookware and dishes (St. Joseph's Healthcare Hamilton, 2013).
- Use paper plates and cups to eliminate dishwashing (St. Joseph's Healthcare Hamilton, 2013).
- Use electric appliances such as can openers, blenders, food processors and dishwasher (St. Joseph's Healthcare Hamilton, 2013).
- Consider buying easy to prepare or frozen meals (St. Joseph's Healthcare Hamilton, 2013).
- Use a cart to transport heavy objects.

Environmental Modification

Here are some ways you can modify the environment to make items more accessible during cooking.

- If you mobilize with a wheelchair, use a side-by-side refrigerator in which the freezer is adjacent to the refrigerator so that you can access the freezer ("Kitchen Modifications", n.d.).
- Label containers with black bold letters in all caps on a white background to help make identifying foods easier if you have low vision post stroke ("Kitchen Modifications", n.d.).
- Space out between bottles to make identification and removal from the shelf or rack easier ("Kitchen Modifications", n.d.).
- Switch some foods or spices to containers with larger-sized lids to help make the containers easier to open ("Kitchen Modifications", n.d.).

Use Adaptive Devices

Here are some adaptive devices to aid you during meal prep.

- Roker Knife: A knife that requires light rocking motion to cut (Hoffman, 2016).



- Verti-Grip Professional Knife: uses mostly downward pressure, and the weighted blade and grooved handle are designed to maximize control (Hoffman, 2016).



- Slicester™ Cheese Slicer: a one-handed slicing device used to cut sandwiches, snack trays, and more (Hoffman, 2016).



- Swedish One-Handed Cutting Board: uses a spike that holds food in place for you, allowing you to control the knife without slipping or making uneven cuts (Hoffman, 2016).



- **Multi-Function Food Prep Board:** this also uses spikes to hold food in place, as well as, a stainless-steel graters and collection bowls so that you are not limited just to slicing and dicing (Hoffman, 2016).



Occupational Engagement

Due to the cerebrovascular accident (CVA), people have impairments in the neuromusculoskeletal and movement-related functions, which can limit them from preparing meals successfully. The proposed treatment options can improve occupational engagement for people after stroke. For example, a stroke survivor may easily feel fatigued while cooking. Similarly, a person after CVA may have hemiplegia which can make it difficult for them to chop/cut food, or a person in wheelchair may find it challenging to reach a top freezer when preparing meals. All of these situations will impede them from adhering to the DASH diet, which is a beneficial prevention method for a recurrent stroke. As a result, my treatment approaches can help survivors break through these obstacles because using energy conservation techniques would accommodate for the reduced energy, a rocker knife would compensate for bilateral hand use while cutting, and modifying the refrigerator would make it easier for them to access food. Ultimately, my solutions would allow them to make healthy meals while following the DASH diet.

ICF Code:

- d630 Preparing meals: Planning, organizing, cooking and serving simple and complex meals for oneself and others, such as by making a menu, selecting edible food and drink, getting together ingredients for preparing meals, cooking with heat and preparing cold foods and drinks, and serving the food.

Additional Resources

These are some additional resources to supplement the treatment options I provided.

1. *Easy DASH Diet Recipes*

<https://www.webmd.com/hypertension-high-blood-pressure/features/dash-diet-meal-ideas#1>

This link provides some easy DASH diet recipes to try while following the above treatment methods.

2. *DASH Diet Basic Information*

<https://www.youtube.com/watch?v=dCyfrii02Qw>

This is a link to a video that provides some useful information about the DASH diet. For example, it talks about what type of food to buy, what to look on food label, etc.

3. *Easy Mediterranean Diet Recipes*

<https://greatist.com/eat/mediterranean-diet-recipes-for-beginners>

This link provides some easy Mediterranean diet recipes to try while following the above treatment methods.

4. *Link to Buy a One-handed Cutting Board*

https://www.amazon.com/Etac-Deluxe-One-Handed-Paring-Rocker/dp/B06XFW76WV/ref=sr_1_2?dchild=1&keywords=One-Handed+Cutting+Board&qid=1592014031&sr=8-2

This is a link to buy a one-handed cutting board.

Interprofessional Help

There are other healthcare professionals that can help in preventing a recurrent stroke.

- Physician: consult with your primary care doctor regularly so that they can monitor your blood pressure, diabetes, and overall health. They can also prescribe blood thinning drugs to prevent any clotting.
- Nutritionist: a nutritionist can further advise you on specific dietary needs, for instance, they can tell you which diet would be the best to follow. They can also inform you on ways to follow these diets effectively.

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