

PATIENT COMPLIANCE TIP SHEET

Dietary Guidelines Following a Stroke

A stroke may be very frightening to both the patient and family. It helps to remember that stroke survivors usually have at least some spontaneous recovery or natural healing and often recover further with rehabilitation. Two aspects of recovery that will be discussed here are ongoing treatments that will help support the patient's general health while undergoing various rehabilitation therapies, and prevention measures that will guide him/her toward a healthy weight and making improvements to his/her pre-stroke lifestyle to reduce his/her risk of having another stroke in the future. Not all of these issues or guidelines will apply to you/your family member. A *Registered Dietitian* will be able to assist you in personalizing an eating plan to meet your family's individual needs. Other specialized members of the healthcare team such as *Physical and Occupational Therapists* will assist with other areas of the patient's care as appropriate.

How can a stroke affect one's ability to eat?

Depending on the type and severity of the stroke a person may have little or no change in his/her ability to eat, or he or she may have severe impairments.

- *Motor deficits* can include muscle weakness of the tongue and lips, or nerve damage resulting in lack of coordination of muscles of the mouth, tongue and throat. Swallowing may become difficult or even dangerous. Chewing may become a challenge requiring altered food textures. If the hand muscles are affected the patient may need to be assisted with eating.
- *Sensory deficits* may affect the ability to smell or taste food, making food seem unpalatable and leading to decreased food intake.
- *Cognitive deficits* can include problems such as short attention span, visual field problems, judgment problems such as not knowing how to get the food from the plate to his/her mouth.
- *Vision, hearing, and speech problems* can make a variety of previously simple activities suddenly become very challenging or even impossible.

Why is weight so important?

Frequently stroke survivors will experience a period of depression. Loss of appetite is one possible and common symptom of depression. Combined with feeding problems such as those listed above, decreased food and fluid intake may result and malnutrition can occur. Malnutrition can quickly lead to a variety of problems including muscle loss causing weakness, skin breakdown leading to pressure ulcers, and an overall decline in health. Weight loss is one way that health professionals can monitor a patient for signs of inadequate nutrition.

At other times weight gain or other weight changes can be an important sign alerting health care providers to the onset of new medical problems, or may be an important method of monitoring an illness or treatment.

For overweight patients, gradual weight loss will be an important step toward preventing future strokes or other cardiovascular diseases. Weight loss helps to lower blood pressure and blood fats such as cholesterol, and it reduced the workload on the heart. In addition, healthy weight loss will ease mobility and transfers, which can be especially important during the rehabilitation period. A *Registered Dietitian* can assist with determining a healthy rate of weight loss as well as what types of foods should be included in the diet and in what amounts. The diet will need to be personalized to meet all of the person's goals such as improving blood sugar control, lowering triglyceride levels, or minimizing fluid retention. Physical activity will be equally important and an *Exercise Physiologist* can help tailor a program ideal for the patient.

What types of problems can occur?

Chewing or Swallowing Problems

A *Speech Language Pathologist* will evaluate the patient through a variety of tests and procedures to determine the most advanced texture of food and thinness of fluid that is safe for the patient to consume. Food textures range from a Pureed to a Regular consistency. Sometimes modifications such as extra gravies and sauces may be suggested to make foods both tastier and easier to eat. Liquids often will need to be thickened to prevent them from being breathed into the lungs. There are several levels of thickening: nectar, honey and pudding. Thickened products may be pre-made, or a thickening agent may be stirred into thin liquids to make the desired thickness. Specially designed utensils called adaptive equipment may be provided that allow a stroke survivor to eat or drink more independently. The *Registered Dietitian* and *Speech Language Pathologist* usually work closely together to ensure that patients and family members are all well educated on each aspect of feeding, especially if a patient will be discharged to home following rehabilitation.

Inadequate food intake

Many people are surprised to learn that stroke survivors may actually need more protein and calories than they did before the stroke. This is at least partly because the body needs a lot of energy for healing. In a rehabilitation setting, exercising increases calorie needs even further. When feeding and appetite problems are added to this need for increased nutrients, it is often very hard for stroke patients to eat enough to meet the body's demands through meals alone. Here are some common complaints and some solutions.

- “Nothing tastes good.” There are many reasons why patients may find the food in a facility unpalatable. In addition to the possible loss of smell or taste sensation from the stroke itself and loss of appetite due to depression, many medications can alter the taste of foods. Flavor enhancers can sometimes be used in the cooking to give foods a stronger flavor. Social isolation and differing tastes in cuisine for ethnic or any other reason can also play a large role in causing some people to eat less when they are in a hospital setting. If a dining room is available, this may be a good option for those who are medically able to dine there. It is also critically important that efforts be made to accommodate the

patient's food preferences. Be sure that you are fully aware of all of the options available to you/your family member.

- "I'm just not hungry." It's always important for patients to communicate well with their healthcare team members. If depression is the cause of the appetite loss and it is diagnosed right away, treatment will often cause the appetite to return. If it is not depression or social isolation and the patient is receiving foods that they would typically enjoy, the medication list can be evaluated to see whether perhaps a medication might be causing the problem and could be changed to an alternate. When all else fails, there are medications that are used specifically to stimulate appetite in these situations. Many times *Physicians* are not aware that their patients are experiencing these problems unless the patient or family members bring them to his/her attention. Nursing staff can be equally helpful by relaying messages to *Physicians*.
- "My teeth are loose." If a patient loses a significant amount of weight, his/her dentures or other dental devices may no longer fit well. A visit to the *Dentist* will be needed, but until then softer foods that are easier to chew can be served. Sometimes it is better to simply remove the poorly fitting device and eat without it than to attempt to use it when it is loose. This may be recommended anyway if motor dysfunction causes the jaws to move differently than they did when the device was fitted. Good oral care in general is very important to maximizing one's ability to eat and enjoy food. In fact, new research has found a link between untreated gum disease and increased risk for stroke, heart disease, and other diseases.
- "I just can't eat a lot at one time." A good solution to this problem is requesting small meals and snacks between meals. Focus on eating the highest calorie most nutrient dense foods first. A *Registered Dietitian* can work with the patient to find ways to increase the calories and protein in meals and snacks. Sometimes a supplemental food or beverage may be used. These supplements may be in the form of powders, canned or boxed beverages, bars, puddings and others. They generally come in several flavors. Many of these can be purchased for home use as well and are available in grocery stores and pharmacies.

Need for Tube Feeding

Sometimes a stroke survivor may not be able to safely eat or drink and will instead receive his/her nutrition through a feeding tube. Other times a patient may be eating but is unable to meet 100% of his/her nutrient needs and is becoming malnourished despite all other attempts, and then meals may be supplemented with a tube feeding. Tube feedings may be a temporary solution, or they may be required for the patient's remaining life. The *Registered Dietitian* will work closely with the *Physician* to assure that every effort is made to assist the patient to eat as well as he or she can first, and only then to use the tube feeding to provide the remaining nutrient needs so that malnutrition does not impair the patient's recovery.

If a patient is to return home with the tube feeding, a visiting *Nurse* or other home health care service may be provided. If family members will be directly involved in the patient's care they should be sure to receive training on administering the tube feeding before taking the patient home from the hospital. The *Nurse* and *Registered Dietitian* may both

be involved in this training. You will also need to be given information on how to purchase the tube feeding product unless that has already been arranged for you by *Social Services*. Tube feeding products come in many different types and many are designed specifically for use with particular diseases. It is important not to change the product or the quantity unless instructed to do so.

What do we do now that we're home?

Cooking tips

Here are several suggestions that may make eating easier and more pleasurable for you. If you've been given specific guidelines to follow at home by your healthcare team, be sure you adhere to them.

- Eat soft foods that are easy to chew and swallow. Examples include: scrambled eggs, mashed potatoes, macaroni and cheese, creamy soups, hot cereals, cottage cheese, bananas.
- Cook foods until soft and tender. Tenderize meats or stick with poultry and fish.
- Cut foods into small pieces or process in a blender or food processor to a pureed texture.
- Add gravies, sauces and other condiments to foods to increase moisture.
- Eat foods at room temperature to enhance the flavors. Avoiding hot and cold foods and fluids also helps prevent coughing.
- Try tart foods like citrus fruits or juices. This stimulates saliva production and may help keep your mouth moist while eating.
- Use strong seasonings such as garlic, onion, oregano, rosemary, basil or pepper if your taste sensation is dulled. Experiment to find the flavors you like best.
- Take small bites and chew slowly. Eat in a relaxed atmosphere.

What to eat

The following are foods that are particularly beneficial. If you follow a special diet due to health conditions, don't make any changes without consulting your healthcare providers.

- **Fruits and Vegetables:** There is some evidence that fruits and vegetables may protect against stroke. There is a great deal of evidence that they help lower blood pressure and prevent hypertension, which is a major risk factor for stroke. Eat a variety of different fruits and vegetables, especially those with dark colors and those that are fresh in season.
- **Fatty Fish:** Omega-3 fatty acids found in fatty fish such as salmon, mackerel and sardines are thought to be protective against stroke. Eating these types of fish two to three times a week is recommended, especially if the fish is replacing fatty meats or fried foods. Use caution to avoid any bones. Other sources of omega-3 fatty acids include omega-3 eggs, ground flax seed, and canola and soybean oils.

Essentially the guidelines for stroke nutrition are the same as those for heart health. The following guidelines therefore apply:

- Limit saturated and trans fats to a minimum. Avoid fried foods, fatty meats, butter and margarine, and creamed or whole-milk products. Instead choose lean meats, poultry and fish or substitute legumes and soy products for meats. Choose tub margarines containing plant stanol or sterol esters that help to lower cholesterol. Minimize use of highly processed, canned and frozen prepared foods.
- Limit salt to 2300 mg per day. Substitute other seasonings and flavorings.
- Limit alcohol to two drinks per day for most men and one drink per day for women and lighter weight people. (1 drink = 12 oz beer, 5 oz wine or 1.5 oz 80-proof liquor)
- Choose low fat or fat free dairy products in place of higher fat versions.
- Read food labels carefully watching for the words “whole grain” as one of the first ingredients. Including several servings of whole grain foods each day confers numerous health benefits. Substitute whole grain breads, pastas and flours for their traditional white versions.
- A variety of nuts can be an important component of a heart healthy diet, but not everyone will be able to eat nuts or nut butters. Nuts are very hard and crunchy, while nut butters are thick and sticky. Be sure that they are safe for you before adding nut products to your diet.

Resources

To view or download a series of handouts on stroke prevention and life after stroke by the American Stroke Association visit:

<http://www.strokeassociation.org/presenter.jhtml?identifier=3018561>. Accessed May 2007.

Call the Stroke Association at 1-888-4-STROKE for additional information or to request other fact sheets.

To download the complete copy of *Your Guide to Lowering Your Blood Pressure with Dash, the DASH Eating Plan* visit:

http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/new_dash.pdf. Accessed May 2007.