Stroke Patient Education Workbook

A Guide to Understanding Stroke

This workbook is designed to help you become a well-informed participant in your health care decisions regarding your stroke. We hope this will help you better understand stroke and guide you through your recovery and rehabilitation.

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Pickup Family
Neurosciences Institute

Forward

A Guide to Understanding Stroke

It is our sincere hope that this stroke patient education workbook will provide you and your loved ones with helpful information. This is designed to be your personal workbook during your stages of recovery. Understanding what happens when a stroke occurs and being a knowledgeable participant in your treatment plan are essential for your recovery and rehabilitation.

This workbook is organized to help you understand the general and specific information regarding your stroke. If you or a family member have questions after reading this material or at any time, please contact the Neuroscience Stroke Nurse Navigator at 949-764-3628 or 949-764-3623.

Some of the enclosed materials were selected from publications of The National Stroke Association, The American Heart Association/American Stroke Association, Brain Aneurysm Foundation, The American Academy of Sleep Medicine, and The Brain Attack Coalition.

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Welcome to Hoag's Stroke Program

Hoag Stroke Program Mission Statement

Stroke patients at Hoag receive the highest level of care through a patient-centered, integrated, multidisciplinary team approach, using the best in evidence-based practice, state-of-the-art technology and advanced research.

Pickup Family Neurosciences Institute's Stroke Program is DNV certified as a Comprehensive Stroke Center at its Newport Beach campus, and a Primary Stroke Center at its Irvine campus. Hoag's Stroke Program has received the American Stroke Association's Get With The Guidelines – Stroke Gold Plus performance achievement award with Target: Stroke Honor Roll Elite, Advanced Therapy, and Target: Type 2 Diabetes Honor Roll designations. Hoag is also ranked as a High Performing Hospital for Stroke Care by *U.S. News & World Report*.

Our Stroke Program is patient-centered with an advanced approach to caring for our patients. The Stroke Team is multidisciplinary involving nurses, therapists, care managers, social workers as well as physicians from other specialties to assure optimal medical management and therapies are provided to each of our stroke patients.

Hoag Newport Beach is designated a Stroke Neurology Receiving Center with Orange County EMS.

Meet the Team Members

Helping you to maximize your recovery is a multi-disciplinary team effort. The stroke team includes doctors, nurses, nursing aides, respiratory therapists, physical therapists, occupational therapists, speech/language pathologists, care managers, social workers, dietitians, your family, friends, and YOU.

Your physician will determine which members of the multi-disciplinary team will assist you in your recovery. Although these professionals have different specialties, they share a common goal of helping you to recover.

Primary Care Physician

Your primary care physician or hospitalist directs and plans your medical care in cooperation with your neurologist and neurosurgeon.

Neurohospitalist

Your neurohospitalist is a hospital-based neurologist who diagnoses and treats diseases of the nervous system.

Stroke Program Medical Director

The Stroke Program Medical Director is a Neurohospitalist who is fellowship trained in stroke and cerebrovascular disease. He oversees and directs the care of the stroke patient in conjunction with the other physicians, nurses and staff that make up the stroke team. He also ensures that patients receive consistent, state-of-the-art care in accordance with the latest scientific research.

Registered Nurse

Your registered nurse (RN) will assist your progress, monitor your recovery and administer your medications. Throughout your hospitalization, your RN will assess your neurological function, level of pain, signs and symptoms of any complications. Your RN will educate you regarding prevention of complications and help communicate any concerns that you and your family may have to your physicians and other healthcare members.

Patient Care Assistant

Your patient care assistant will help you with personalized care and daily needs. He or she may also perform procedures such as blood pressure, temperature and drawing of blood.

Stroke Program Nurse Navigator

Your stroke program nurse navigator works collaboratively with the physicians, nurses and multidisciplinary team to oversee your care and manage quality improvement. Your navigator will also assist with your education regarding stroke signs and symptoms, treatment and prevention of complications, and will meet with you and your family to assess your individual needs. At 30 days and 90 days after discharge, you will receive a phone call from your navigator to assess your progress and reinforce any education. Hoag's nurse navigator also coordinates the monthly support group meetings and educational flyers emailed monthly.

Respiratory Therapist

Your respiratory therapist (RT) works with the healthcare team to help maintain and/or improve the health of your lungs. He or she will assist you with breathing exercises, breathing medications, ventilator care and coughing techniques.

Speech/Language Pathologist

Your speech language pathologist (SLP) will work with you and your family to evaluate and treat any problems you may have in your speech, language, cognition and/or ability to swallow. Your physician may initially order no liquids or food by mouth (called NPO) until your swallowing ability has been assessed by a SLP. The SLP will determine if you have dysphagia which is difficulty swallowing and may make recommendations regarding food and liquid textures. The primary goals of the swallow evaluation are to reduce your risk of aspiration (when something goes down the airway) and assist in ensuring that intake of food/liquid is efficient. The SLP's will collaborate with your physician and other members of the team to develop an individualized plan to help you improve with strategies, exercises and education.

Occupational Therapist

Occupational therapists (OT) will assist you in managing activities of daily living (ADL) such as self-feeding, bathing, toileting, grooming, dressing, home management skills and community re-entry. These tasks are accomplished by working to improve coordination, strength, and function of the arms, and may utilize modified techniques and/or adaptive equipment. OTs will also address problems related to vision, perception, problem-solving, safety, reasoning, decreased sensory awareness, sitting balance/endurance and positioning. One of the important aspects of therapy is the education and training for the patient and caregiver.

Physical Therapist

Physical therapists (PT) will help you regain the ability to be mobile again. They focus on deficits in your strength, balance, stamina, coordination and safety to help you regain bed mobility along with the ability to stand up, balance, walk, and navigate stairs. Your PT will also assess the need for any equipment such as a cane or walker, address any safety issues for returning home, and provide training for you and your family that will assist you through a safe transition back to self sufficiency.

Care Manager

Your care manager is an RN or social worker who assesses your status and evaluates your treatment plans throughout your hospital stay. He or she works closely with your primary physician, healthcare professionals and family to develop a quality discharge plan and coordinate all options for post-hospital continued care, including transition to a lower level of care, alternative medical services, durable medical equipment and supplies.

Social Worker

The clinical social worker is a licensed professional (LCSW) who will help provide you and your family with emotional counseling, crisis intervention, support groups and community resource information.

Dietitian

The dietitian works with your doctor to meet your nutritional needs. He or she may check your eating habits and teach you about your diet. He or she will make sure that meals are healthy and tasty.

Chaplain

The hospital chaplain is available to provide spiritual guidance and emotional support for you and your family.

What to Expect During Your Hospital Stay

Hoag Stroke Program follows evidence-based state-of-the-art stroke treatment protocols. Once your stroke is diagnosed via clinical assessment and brain imaging, treatment begins to help stabilize your symptoms. Then additional assessment is initiated to identify the reason for your stroke and the risk factors involved. The treatment of your stroke entails a through cerebrovascular and cardiac diagnostic evaluation.

At the bedside, you will be evaluated daily by the Stroke Team to update you and your family on diagnostic results, medications and rehabilitation needs. A key component once the assessment is complete and you are medically stable, is to initiate rehabilitation evaluations by the physical therapist, occupational therapist and speech therapist. Aggressive rehabilitation is an essential part of your physical and cognitive recovery. A care manager will also visit you routinely to assist you and your family with discharge and other social needs.

This Stroke Patient Education Workbook will be reviewed with you and your caregivers to help you understand the type of stroke you suffered and the cause of the stroke. In addition, important educational topics such as the signs and symptoms of stroke, calling 9-1-1 at the first signs of symptoms, your risk factors and recommendations for stroke risk reduction.

You are the most important individual of your stroke recovery and our goal is to practice a holistic approach addressing your physical, emotional, spiritual and social needs to maximize your recovery.

All About Stroke

What is a Stroke?

Stated simply, a stroke is an injury to the brain caused by an interruption of the blood supply. Brain cells must have a continuous supply of blood. When a person has a stroke, this continuous supply is cut off and the brain cells suffer damage.

The brain also must receive oxygen and nutrients (such as glucose) from the blood vessels to function correctly. When brain cells do not function, neither do the parts of the body controlled by those brain cells.

The extent and location of the injury to the brain dictates which brain functions are affected by the stroke.

A stroke is a sudden unexpected event with many different results. Some stroke patients recover to a degree that normal life can be resumed. Some stroke patients have residual damage (loss of function) that is not recoverable. No two stroke patients have exactly the same injuries or disabilities.

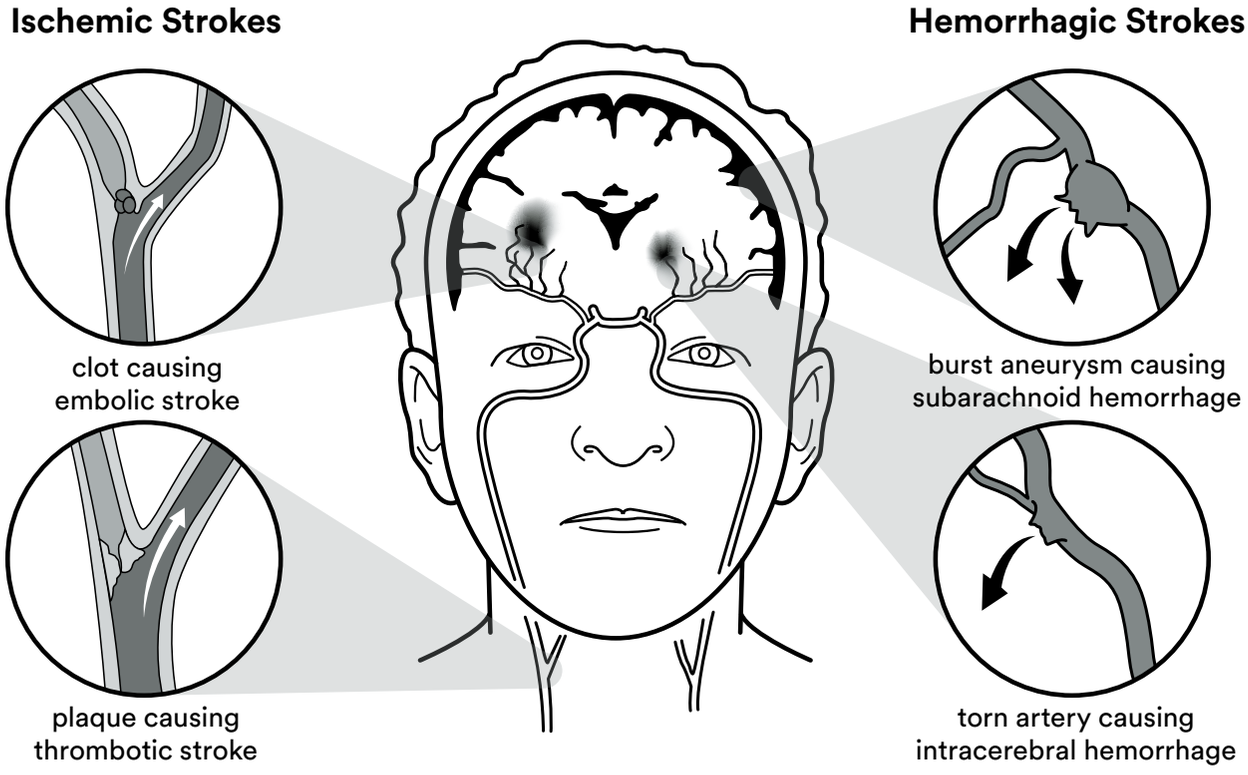
Disability from stroke can take many forms depending on the area of the brain that is damaged. The stroke's effect may be slight and temporary or it may be serious, even fatal. A typical stroke survivor may not be able to use his or her right or left side of the body, or may have communication problems such as not being able to speak or read. Every stroke is different.

Because a stroke patient's recovery is both medical and rehabilitative, the recovery continues over a period of time, which can be weeks, months, or even years. Sometimes the damage done to the brain cells cannot be overcome. Only time can tell the optimum recovery for each patient.

If you or your loved one has had a stroke, you are not alone. Every 40 seconds someone in the United States will experience a stroke. This amounts to approximately 795,000 people a year. Currently, about 610,000 people suffer first strokes each year. These numbers are expected to increase significantly as a result of an increase in the country's aging population.

Types of Stroke

There are two types of stroke: ischemic and hemorrhagic. The majority (87 percent) of all strokes are ischemic, while the remaining 13 percent are hemorrhagic.



Ischemic Stroke

The most common type of stroke, an ischemic stroke, occurs when a blood clot blocks an artery cutting off the flow of blood to the brain. Without enough oxygen being delivered to the affected area, brain cells will begin to die and stroke survivors will start to have problems using certain parts of their bodies.

There are two types of ischemic strokes: embolic and thrombotic. During an embolic stroke, a blood clot (embolus) or other undissolved piece of material moves through the body and lodges in a brain artery cutting off the supply of blood. A thrombotic stroke, a blood clot (thrombus) forms in the brain artery and blocks the flow of blood.

Hemorrhagic Stroke

Strokes caused by a bursting blood vessel in the brain that spills blood into the brain are called hemorrhagic strokes. High blood pressure and brain aneurysms can both cause the wall of a brain artery to become weak, and possibly result in this type of stroke.

There are two types of hemorrhagic stroke: intracerebral and subarachnoid. An intracerebral hemorrhage is caused when a ruptured blood vessel bleeds into the tissue deep within the brain. The bleeding causes brain cells to die, and that part of the brain no longer functions correctly. In a subarachnoid hemorrhage, a blood vessel bursts near the surface of the brain and bleeds into the area between the brain and the skull. This bleeding may increase pressure in the brain, injuring brain cells.

What is a Transient Ischemic Attack (TIA)?

If an artery leading to the brain, or inside the brain, becomes blocked for a short period of time, the blood flow to an area of the brain slows or stops. This lack of blood and oxygen can cause temporary symptoms that are similar to a stroke. These symptoms usually last 5 minutes or less and leave no permanent injury to the brain.

TIAs are a serious warning sign of stroke and should not be ignored. As many as 20 to 40 percent of people who experience a TIA go on to have a stroke if risk factors are not treated.

Your stroke was a _____ stroke;

caused by _____; located in the

_____ of the brain.

See page 15 for more information.

Acute Stroke Treatment

Management of Ischemic and Hemorrhagic Stroke

- The first step is determining if the stroke is caused by the interruption of blood flow (ischemic) or by bleeding from an abnormal vessel (hemorrhagic) with rapid brain imaging.

Clot Dissolving or Clot Removal for Ischemic Stroke

MEDICATION TREATMENT WITH INTRAVENOUS (IV) TENECTEPLASE (TNK) TO DISSOLVE THE CLOT

- Tenecteplase is a medication used for the treatment of acute ischemic strokes.
- When promptly administered, it can save lives and reduce the long-term effects of stroke.
- Tenecteplase (TNK), is given through an IV in the arm. It works by dissolving the clot and improving blood flow to the affected part of the brain.
- Tenecteplase (TNK) needs to be given within 4.5 hours of having a stroke in eligible patients.
- Many people miss this key brain-saving treatment because they don't arrive at the hospital in time for Tenecteplase (TNK) treatment. This is why it's so important to identify a stroke and seek treatment immediately for the best possible chance at a full recovery.

MECHANICAL TREATMENT TO PHYSICALLY REMOVE THE CLOT

- Physical removal of a blood clot in a large blood vessel in the brain causing the stroke is called a mechanical thrombectomy.
- This procedure has been clinically proven to prevent or reduce disability in many patients suffering from a stroke due to occlusion of a large brain artery, regardless of whether IV Tenecteplase (TNK) is given or not.
- To remove the clot, a specially trained doctor threads a long tube, called a catheter, through an artery in the groin up to the blocked artery in the brain using image guidance.
- Two different devices may be used to remove the clot: Stent retrievers grab the clot, which is then removed with the stent; Aspiration catheters remove the clot with suction. These devices may also be used together.
- Patients must meet strict criteria to be eligible for this procedure, so that the potential benefit outweighs the risks of the procedure.
- Some patients will meet criteria for both Medication Treatment with IV Tenecteplase and Mechanical Thrombectomy.

RISKS OF IV TENECTEPLASE (TNK)

- The main risk of IV Tenecteplase (TNK) is that it can cause serious bleeding in the head or body. In clinical studies, the bleeding risk may be lower with Tenecteplase.
- If bleeding happens in the brain, it can cause worse stroke symptoms or even death.
- Doctors are very careful about using IV Tenecteplase (TNK). For example, a brain scan is done before Tenecteplase treatment to make sure you have no signs of bleeding.
- After treatment, you are closely watched for the first 24 hours in an Intensive Care Unit to make sure you have no internal bleeding or allergic reactions.
- If you notice any headache, tongue swelling, bleeding gums, nose bleeding, bloody urine or stool; notify your nurse immediately.

RISKS OF MECHANICAL THROMBECTOMY

- The risks of thrombectomy are mainly related to the procedure itself. Risks include bleeding where the catheter was put in and a tear or sudden closure of a blood vessel.
- Doctors are very careful about using thrombectomy. They will make sure it is the right procedure.
- After treatment, you are closely watched for the first 24 hours in an Intensive Care Unit.
- If you notice any headache or bleeding at the puncture site, let your nurse know immediately.

Management of Hemorrhagic Stroke

- **ICH Management**
  Treatment goal is to avoid further hemorrhage. Neurosurgical consult and blood pressure management are key to best patient outcomes.
- **SAH Management**
  Due to rupture of a brain aneurysm, treatment can include minimally invasive neurointerventional placement of material, such as coils, to clog the aneurysm from within, or neurosurgical placement of a metal clip at the base of the aneurysm.
- **AVM Management**
  Treatment can include neurointerventional embolization, Gamma Knife radiosurgery, or neurosurgery to remove the abnormal blood vessels.

Warning Signs of Stroke

Stroke is a 911 Emergency

Learning the symptoms of stroke could save a life. It is critical to seek medical attention as quickly as possible after the first sign of stroke. Call 911 immediately.

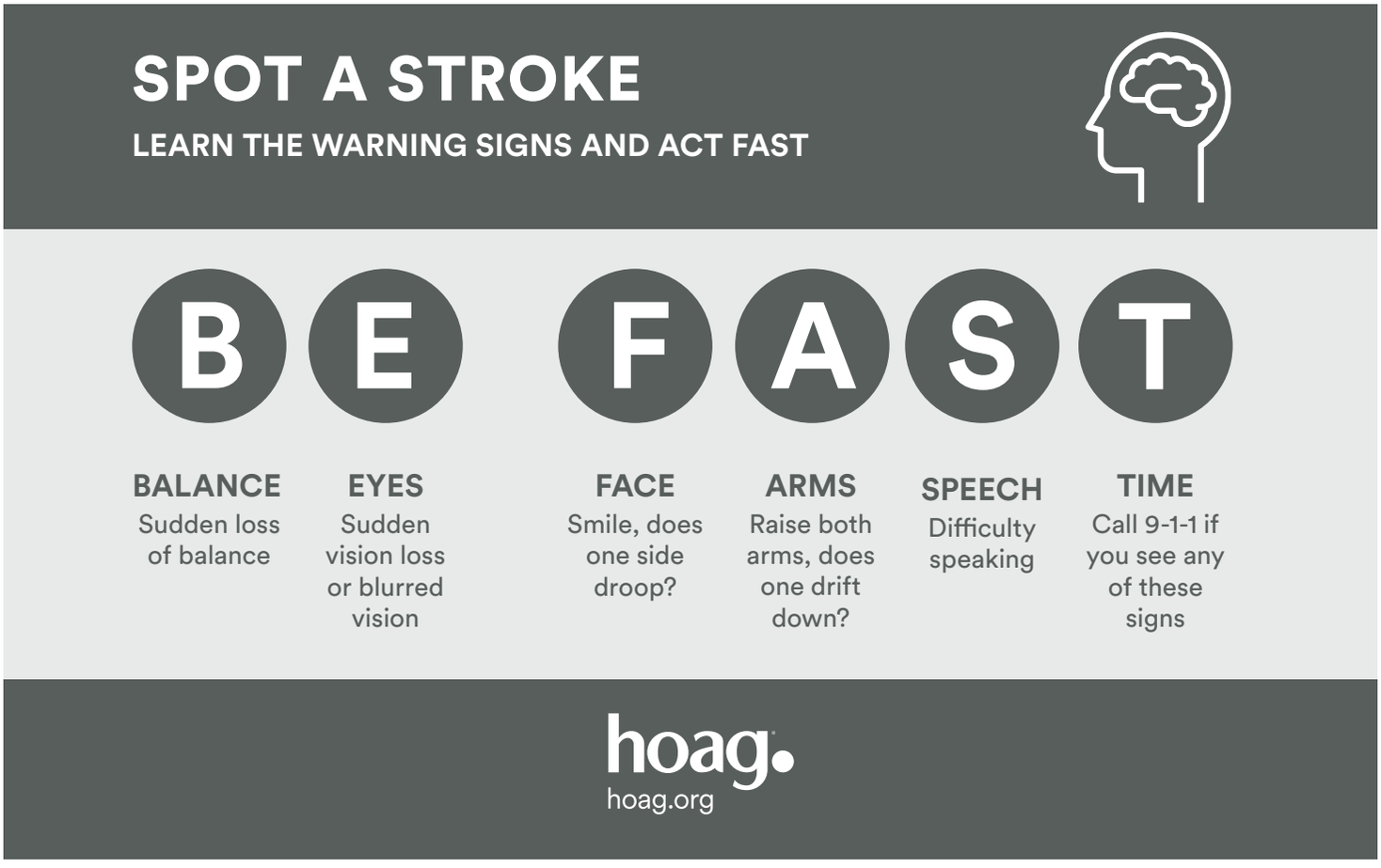
The most common warning signs of stroke include:

- Sudden numbness, or weakness in your face, arm or leg, especially on one side of your body.
- Sudden confusion, trouble speaking, or understanding speech.
- Sudden trouble walking, dizziness, loss of balance or coordination.
- Sudden trouble seeing in one or both eyes.
- Sudden severe headache with no known cause.

Time Last Known Well

If stroke symptoms are witnessed as they happen or a person wakes up with stroke symptoms, it is very important to identify the time the patient was last seen in their usual state of health. This is called the Time Last Known Well. It is very important for family or caregivers to accompany the patient to the hospital to provide this time and other important information that will guide medical treatment.

Stroke is an Emergency – Every Minute Counts



Stroke Facts

- Approximately 795,000 people suffer strokes each year. It is the major cause of disability among adults.
- Stroke kills nearly 148,000 people each year, and is the fifth leading cause of death, ranking only behind heart attack, cancer, chronic lower respiratory diseases, and unintentional injuries.
- The risk of stroke more than doubles with each decade after age 55. The aging of the U.S. population suggests that the number of people who have strokes could increase significantly in coming years.
- People with diabetes, especially those who have high blood pressure, are at increased risk for stroke.
- A person who has had a stroke is much more likely to have another than a person who has never had a stroke.
- Everyone has some stroke risk, but making simple lifestyle changes may reduce risk of a first or recurrent stroke.
- Stroke is preventable. Up to 80 percent of strokes can be prevented.
- Stroke is treatable. Learn to recognize stroke symptoms, realize that stroke is an emergency, and get to the nearest certified stroke center immediately.

Frequently Asked Questions

What is the likelihood that someone who has had a stroke will have another?

Anyone who has had a stroke is at increased risk for another. This risk varies with each individual, depending on a variety of factors, including the type of stroke initially experienced. The risk can be reduced through medications and lifestyle changes.

What can I do to prevent a second stroke?

Up to 80% of second ischemic strokes may be preventable. A combination of dietary modification, exercise, a statin, antithrombotic, and blood pressure control can reduce your risk of another stroke. Work with your doctor to create a prevention plan.

How long will it take for me to recover from a stroke?

The most dramatic recovery from a stroke usually comes in the first 3-4 months, but recovery can occur well into the first or second year after the stroke event.

How long does a person continue with rehabilitation after a stroke?

Rehabilitation begins in the hospital, soon after the stroke, and is most intensive within the first few months. In some cases, it continues with a variety of approaches for years.

How is a TIA different from a stroke?

Unlike strokes, these attacks are brief and temporary, lasting less than 24 hours. Additionally, TIAs do not result in permanent brain damage.

What's the difference between "good" cholesterol and "bad" cholesterol?

Cholesterol is a fatty substance that can deposit itself in the arteries. It hardens over time, eventually narrowing the arteries and restricting blood flow.

HDLs are considered the "good" cholesterol because they contain the greatest amount of protein and the smallest amount of cholesterol. They are believed to remove cholesterol from the cells and transport it back to the liver for processing and removal.

LDLs are considered the "bad" cholesterol because they contain the greatest percentage of cholesterol and can stick to the inside of the blood vessels leading to a build up of plaque called atherosclerosis.

Why do I have to take a statin even if my cholesterol level is normal?

Clinical practice guidelines recommend the use of statin therapy to reduce the risk of recurrent stroke in patients who have had a stroke or TIA. In addition to reducing cholesterol levels, statins have an antiinflammatory property that protects the brain.

When can I drive after a stroke?

Driving is often a major concern after a stroke. Safety behind the wheel is extremely important after a stroke. Before you drive, talk to your doctor. He or she can tell you if your stroke has changed your ability to drive. You can also get a driving evaluation to see if you are safe to drive. See page 55 for more information.

Take These Steps to Prevent a Second Stroke

- Manage high blood pressure
- Control cholesterol
- Reduce blood sugar
- Be active
- Eat better
- Maintain a healthy weight
- Quit smoking
- Discuss your medication regimen with your doctor

Risk Factors and Prevention

Uncontrollable Stroke Risk Factors

Are you at risk for stroke? Identify the risk factors that apply to you to find out.

Age
The chances of someone having a stroke increase with age. Two-thirds of all strokes happen to people who are over age 55. Stroke risk doubles with each decade past age 55.

Gender
More women than men have strokes each year, in part because women generally live longer.

Family History
Although actual risk varies, people with a family history of stroke are at risk for stroke themselves.

Personal History of Diabetes
Having diabetes more than doubles stroke risk. This may be due to circulation problems that diabetes can cause. While diabetes is treatable, having the disease increases your risk for stroke. Work with your doctor to manage diabetes and lower your risk. For more information about diabetes see page 13.

Race
African-Americans have a higher risk of death and disability from stroke than whites. Latinos and Asians also are at increased risk. This may be due to a greater incidence and severity of high blood pressure.

Having one or more uncontrollable risk factor(s) does not mean you will have a stroke. It does mean that you should pay special attention to the lifestyle factors and treatable medical conditions that you are able to control to lessen your overall risk.

Controllable Stroke Risk Factors

Lifestyle Factors that Increase Stroke Risk

Smoking
Cigarette smoking is a strong risk factor for stroke. The nicotine and carbon monoxide in cigarette smoke damage the cardiovascular system and pave the way for stroke to occur. Quit smoking now and lower risks.

Alcohol Use
Excessive consumption of alcohol, including binge drinking, is associated with stroke. The American Stroke Association advises consuming no more than two drinks per day for men and no more than one drink per day for non-pregnant women to lower stroke risk. Talk to your doctor if you need help overcoming addiction to alcohol.

Weight
Excess body weight and obesity are linked with an increased risk of high blood pressure, diabetes, heart disease and stroke. Losing weight can significantly reduce your risks.

Exercise
Consult with your physician about an exercise program that involves 30 minutes of exercise five times per week.

Treatable Medical Conditions That Increase Stroke Risk

High Blood Pressure
High blood pressure is the single most important risk factor for stroke because it is the leading cause of stroke. High blood pressure adds to your heart's workload and damages your arteries and organs over time. Normal blood pressure is below 120/80 for adults. Talk to your doctor about ways to control your blood pressure.

Atrial Fibrillation (AFib)

Having atrial fibrillation can increase stroke risk up to five times. That is because AFib causes the heart's upper chamber to beat incorrectly. This can allow blood to pool and form clots that can travel to the brain and cause a stroke. Work with your doctor to know your risk for stroke related to AFib and develop a treatment plan to lower your risks.

High Cholesterol

People with high cholesterol have an increased risk for stroke. Large amounts of cholesterol in the blood can build up in the arteries and lead to decreased blood flow and the formation of clots. This can lead to a stroke. Work with your doctor to develop a plan to lower your cholesterol. See page 35 for more information.

Obstructive Sleep Apnea (OSA)

A person is considered at risk for OSA if two or more of the following occurs:

- Witnessed apneas or pauses in breathing during sleep
- Obesity, defined as:
  - BMI > 35 (Weight in kg/Height in meters)
- Neck circumference > 40 cm (about 16 inches)
- Male gender
- Age > 50
- Excessive daytime sleepiness
- Snoring loudly

The more items you identify with, the higher the risk.

According to the National Stroke Association, sleep apnea can be an after effect of stroke or the cause of a first-time or recurrent stroke. OSA causes low oxygen levels and high blood pressure, both of which can increase the risk of stroke. Your doctor can refer you to a sleep specialist to determine if you have OSA.

Previous Stroke

You cannot control the fact that you have had a stroke, but you can control the lifestyle and medical risk factors that contributed to your stroke. Having one stroke increases your chances of having another one. A transient ischemic attack (TIA), or temporary stroke symptoms, is another strong indicator of stroke. One-third of all people who experience a TIA go on to have a stroke within five years.

Prevention is Your Key to a Stroke-Free Life

Detection and management of stroke risk factors is the best way to lower your personal risk for stroke. If any of the controllable risk factors listed apply to you, the National Stroke Association recommends a visit to your doctor to discuss your individual risk and develop a treatment plan.

Regular doctor's visits can help diagnose these problems and help prevent a stroke before it happens. Stroke risk factors can be managed by lifestyle changes and/or medical care.

More Information About Diabetes

What is Diabetes?

When you have diabetes, your body either does not make enough insulin, cannot properly use the insulin it does make or both. This affects how your body turns food into energy and causes blood sugar (also called glucose) levels to be higher than normal.

Over time, uncontrolled diabetes and high blood sugar levels can lead to serious health issues that can be life threatening, but you can learn how to manage and control it.

Warning Signs of Diabetes

- Increased thirst
- Increased hunger
- Dry mouth
- Frequent urination or urine infections
- Nausea and/or vomiting
- Unexplained weight loss
- Fatigue
- Blurred vision
- Slow wound healing

Risk Factors Related to Diabetes

There are several risk factors that may increase the chances of developing diabetes, including:

- Family history of diabetes
- Lack of exercise
- Overweight
- Over 45 years old
- History of gestational diabetes (diabetes during pregnancy)
- Cultural background: African American, Hispanic/ Latinos, American Indian, Asian, Indian and Pacific Islanders are particularly high risk for type 2 diabetes

Types of Diabetes

TYPE 1 DIABETES

Type 1 diabetes is an autoimmune disorder where the cells in the pancreas are damaged and can no longer produce insulin. This usually occurs sometime during childhood, adolescence, or early adulthood but can happen at any age. People with type 1 diabetes need insulin daily to manage blood sugar levels

TYPE 2 DIABETES

Type 2 diabetes occurs when the pancreas doesn't make enough insulin, when your body cannot properly use the insulin it makes, or both. This is called insulin resistance. When this happens, blood sugar levels start to rise. Diet, exercise, and medication can help people with type 2 diabetes manage blood sugar levels.

PREDIABETES

Prediabetes occurs when blood sugar levels are slightly higher than normal but not high enough to be diagnosed with diabetes.

The A1c Test

The hemoglobin A1c is a blood test, done in a lab or at your healthcare provider's office. This test is different from the blood sugar check you do each day. The A1c test measures how much sugar is attached to the hemoglobin where it stays for the life of the red blood cell. Because red blood cells live for about 3 months, the result shows the average level of sugar in your blood for the past 3 months.

Getting your A1c test done every 3 months helps determine whether your blood sugar targets have been reached and maintained. A reasonable goal for many adults is less than 7%. Your healthcare provider will decide on an A1c goal that is right for you.

BG Targets

The American Diabetes Association suggests the following targets for most nonpregnant adults with diabetes:

- Fasting/before meal: 80-130 mg/dL
- Two hours after a meal: Less than 180 mg/dL

Why is High Blood Sugar a Problem?

When blood sugar is high over time, complications that affect your whole body can occur. These complications include heart attack, stroke, kidney problems, vision problems, nerve damage, foot related damage – including amputation.

Self-care Behaviors That Help to Manage Diabetes

- Healthy eating
- Being active
- Monitoring blood sugar
- Taking medication
- Problem solving
- Healthy coping
- Reducing risks

Common Medications

- Biguanide (Metformin)
- Sulfonylurea (Amaryl, Glucotrol)
- DPP-4 Inhibitor (Tradjenta, Januvia)
- GLP-1 receptor agonist (Ozempic, Trulicity, Byetta, Bydureon, Victoza)
- SGLT2 Inhibitor (Invokana, Farxiga, Jardiance)
- Insulin (Humalog, Novolog, Lantus)

Your Brain and You

The brain is the control center of your entire body. Each part of the brain is responsible for controlling a different function of the body, such as breathing, language or emotions. The diagram below outlines the parts of the brain and functions for which they are responsible.

Frontal Lobe
- Movement
- Intelligence
- Reasoning
- Behavior
- Memory
- Personality
- Speech

Temporal Lobe
- Speech
- Behavior
- Memory
- Hearing
- Vision
- Emotions

Pituitary Gland
- Hormones
- Growth
- Fertility

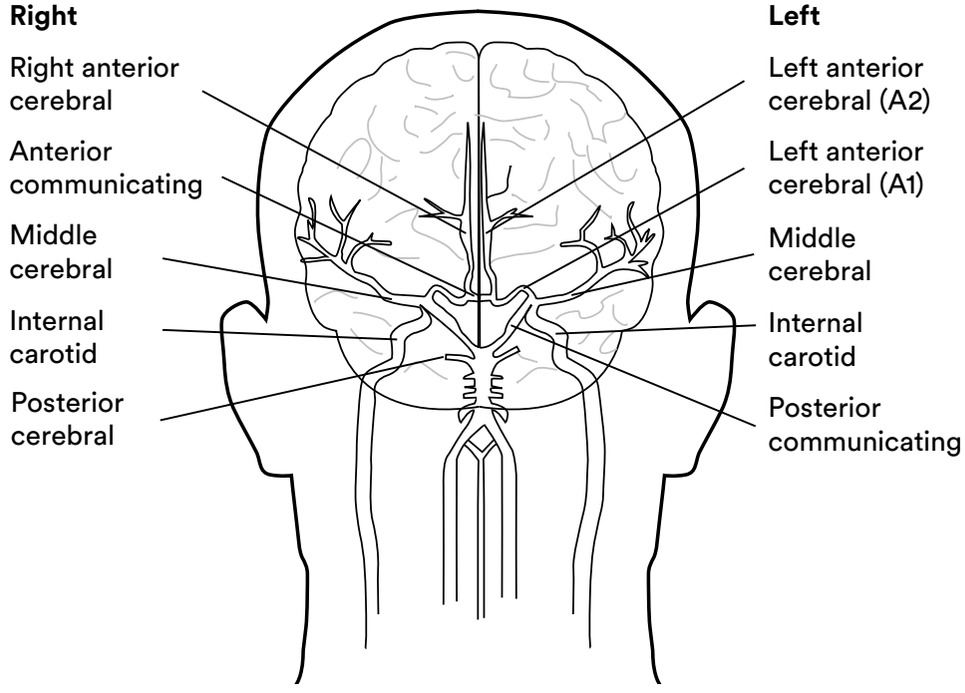
Parietal Lobe
- Intelligence
- Reasoning
- Telling right from left
- Language
- Sensation
- Reading

Occipital Lobe
- Vision

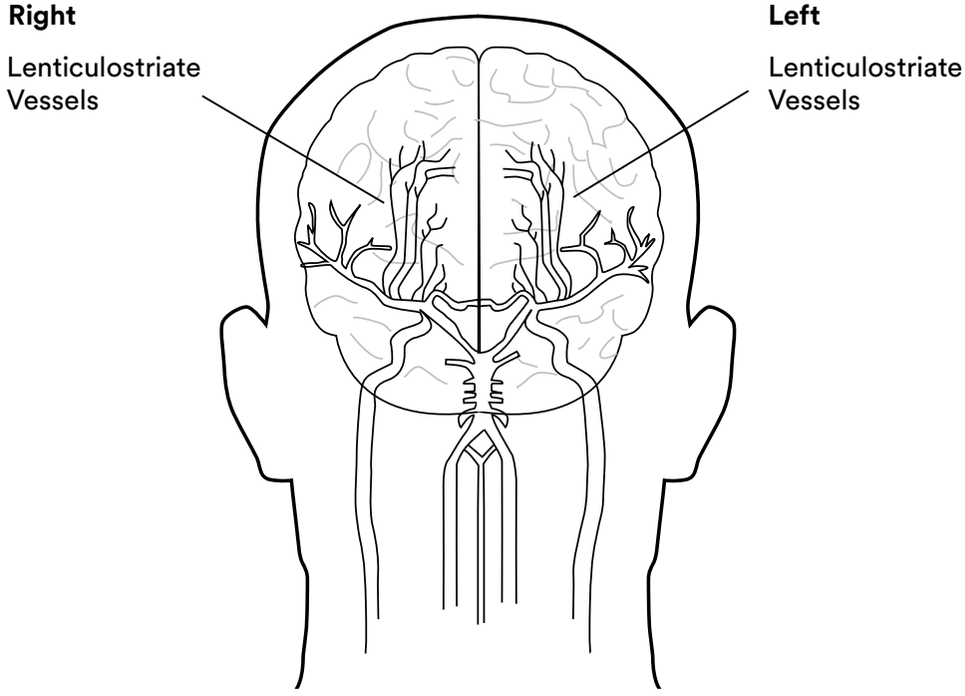
Cerebellum
- Balance
- Coordination
- Fine muscle control
- Eye movements

Brain Stem
- Breathing
- Blood pressure
- Heartbeat
- Swallowing
- Vision
- Eye movements
- Weakness
- Sensation

Anatomy of the Cerebral Vasculature – LARGE CEREBRAL ARTERIES



Anatomy of the Cerebral Vasculature – SMALL CEREBRAL ARTERIES



Right-Brain vs. Left-Brain Stroke

RIGHT BRAIN DAMAGE

Weak or paralyzed left side

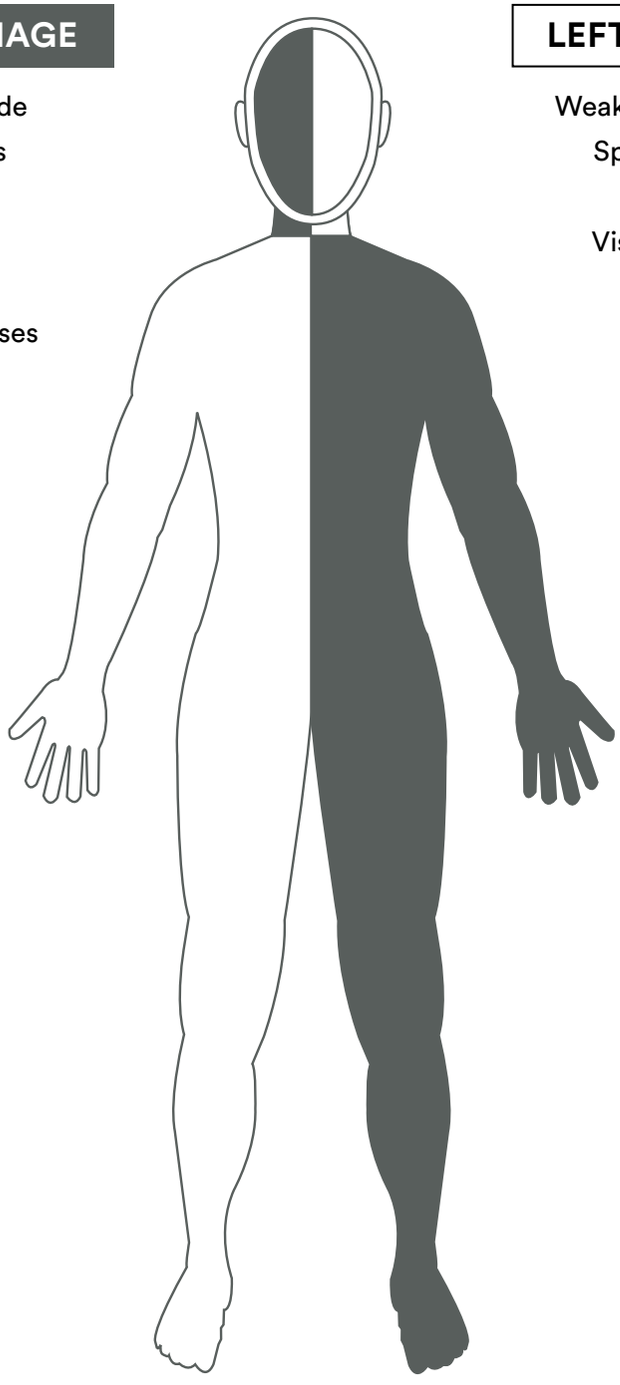
Visual-perceptual deficits

Unaware of deficits

One-sided neglect

Memory deficits

Impaired thinking processes (impulsive)



LEFT BRAIN DAMAGE

Weak or paralyzed right side

Speech-language deficits

Memory deficits

Visual-perceptual deficits

Characteristics Based on Location of Stroke

The brain is a complex organ that controls multiple body functions. When a stroke occurs and blood is unable to reach the region of the brain that controls a specific body function, that part of the body cannot work properly.

For example, if the stroke occurs toward the back of the brain, it is likely to affect the individual's vision. The effects of a stroke depend mainly on the location of the blockage and the amount of damage to the brain tissue.

Right Brain

The effects of a stroke depend on many factors, such as the location of the blockage and the amount of brain tissue that is damaged. Since the brain controls the opposite side of the body, a stroke affecting one side will result in neurological symptoms on the other side. For example, a stroke that occurs on the brain's right side will affect the left side of the face and body. This could bring on any of the following effects:

- Paralysis on the left side of the body
- Issues with vision
- Quick, inquisitive behavior
- Loss of memory

Left Brain

A stroke that occurs on the left side of the brain affects the right side of the body, resulting in any or all of the following effects:

- Paralysis on the right side of the body
- Speech/language issues
- Slow, cautious behavior
- Loss of memory

Brain Stem

When a stroke occurs in the brain stem, it can affect both sides of the body – depending on the severity of the injury – and may leave the individual in what's referred to as a "locked-in" state. In this case, the patient is usually unable to speak or have any movement below the neck.

Cerebellum

If the stroke occurs in the cerebellum, it can lead to problems with balance and coordination, dizziness, nausea, vomiting, and sometimes visual changes.

Small Vessel Strokes

These strokes are sometimes called lacunar strokes. They occur when blood flow to one of the small arteries deep in the brain become blocked. They are usually small strokes, but their location can cause many symptoms. Lacunar strokes are usually related to the long-term effects of high blood pressure, diabetes, smoking, high cholesterol, and obstructive sleep apnea.

Physical Effects

The effects of a stroke will depend on several factors – how widespread the damage is, the type of stroke, which brain cells have been damaged, and how quickly other areas of the brain issue take over the damaged cells. No two patients will have the same physical changes.

The most common effects of a stroke include the following: weakness, numbness and tingling, difficulty with speech or language, changes to vision, depression and/or problems with memory.

Weakness

Weakness after stroke may involve one side of the body, the entire arm and leg, just the arm, or just the leg. The face and mouth may also be involved, and may cause difficulty swallowing, slurred speech or drooling. Patients may experience lack of coordination of the face, arm or leg.

Visual Changes

Patients may have problems with double vision or loss of one side of their vision, experience one-sided neglect or have a blind spot.

Sensation

Changes to sensation may include numbness to the affected area, tingling, pain and inability to recognize objects by touch.

Changes to Muscle Tone

The muscles of the affected arm or leg may experience a change after a stroke. Flaccid muscles are very loose, relaxed and cannot be moved by the patient themselves. The opposite of this is a spastic muscle that is tight at all times. The arm or leg may be held in a rigid position, such as a tight clenched fist. Often the movement seen may be related to the abnormal tone when the affected arm or leg is stimulated.

Fatigue

After a stroke, almost all stroke survivors feel tired or some type of fatigue at some point. Stroke survivors often must work harder to make up for the loss of normal functions (such as being unable to use an arm or hand). You'll probably start to feel less tired after a few months. Some ways to increase your energy are to get plenty of sleep, eat a healthy diet, take rest periods throughout the day, learn to relax – being relaxed lets you use your energy more efficiently, talk about your emotions – coping with frustration, anxiety and anger can be draining. Talk to your doctor about your fatigue. He or she can evaluate any medical reasons for your tiredness such as depression or medication side effects.

Neglect

Some stroke patient's lose the awareness of one side of the body. This may involve ignoring the side of the body, not looking to the affected side or pocketing food in one side of the mouth.

Communication Disorders

If a stroke causes damage to the language center of the brain, there may be language difficulties. Aphasia is a term used to describe a collection of communication difficulties, including problems with speaking, understanding, reading and writing. Intelligence is not altered, although the inability to communicate may leave the impression that the patient is less intelligent than they were before. Stroke can also lead to challenges with reading, writing and math.

Swallowing Disorders

When a stroke affects the face, mouth or throat, patients may experience difficulties swallowing. Dysphagia is the term used to describe swallowing disorders. Signs of dysphagia may include coughing or choking during or shortly after swallowing, increased drooling or chewing, pocketing of food in the mouth, inability to clear throat and pain with swallowing. Patients who have this difficulty are at risk for food or liquids to enter the windpipe (trachea), which can lead to pneumonia. The oral intake of food or liquid may be restricted initially until the ability to swallow is evaluated.

Behavioral and Emotional Changes

After a stroke, people often experience emotional or behavioral changes. This is because stroke affects the brain and our brain controls our emotions and behaviors. Many changes resulting from a stroke can improve with time, including behavioral and emotional changes. Talk to your doctor if you notice any of these changes.

Memory Loss

Patients may experience subtle changes to their memory. They may have difficulty following directions, keeping track of the day or time, identifying familiar objects or performing normal activities in the right order. For example, putting on their shoes before their socks.

Loss of Emotional Control (Pseudobulbar Affect)

Stroke patients may display emotions for no apparent reason or have difficulty controlling their emotions. This may result in sudden laughing, crying or displays of anger. Episodes may come and go quickly, and are often associated with the patient's inability to communicate. This can make social interactions difficult and unpredictable.

Managing Depression After Stroke

Depression – mild or major – is the most common emotional reaction faced by stroke survivors. Following a stroke, it is important for family and friends to show patience and compassion to help survivors recover. Each survivor needs to respond in his/her own way, without pressure to meet the expectations of others who have not experienced a brain injury. It may be impossible for family and friends to understand how they feel.

If your symptoms are severe and last more than two weeks, you may have clinical depression – a medical condition that is painful and can slow the progress of your therapy.

Facts About Post-Stroke Depression

- It can start at any time – immediately following a stroke, during rehabilitation, or after the patient returns home.
- It is extremely common. Studies show that between one-third and one-half of stroke survivors experience depression.
- It is not a character flaw or moral failing.
- It can slow recovery, preventing survivors from participating in therapy.
- It increases risk of another stroke.
- It generally responds well to treatment.
- It is unlikely to go away on its own.

Feeling sad about your losses is a normal reaction experienced by virtually every stroke survivor. However, when that sadness turns to depression, it's time to take action. Your treatment may include therapy with a psychiatrist or psychologist, medication, or a combination of both.

Depression Symptoms

EMOTIONS

- Sadness
- Anxiety
- Guilt
- Anger
- Mood swings
- Irratability

THOUGHTS

- Self-criticism
- Impaired memory
- Indecisiveness
- Confusion
- Thoughts of death or suicide

PHYSICAL

- Chronic fatigue
- Lack of energy
- Sleeping too much or too little
- Weight gain or loss
- Loss of motivation
- Substance abuse

BEHAVIOR

- Withdrawal from others
- Neglect of responsibilities
- Changes in personal appearance

Thoughts You May Be Having

- "I don't have the words to express how I feel."
- "I hate losing control and my independence."
- "I feel like a burden."
- "I feel unlovable."
- "Life will never go back to the way it was."

How Family/Friends Can Help

Family and friends can help by showing compassion and understanding, and being an emotional support rather than having the expectation that everything should be better. Hoag offers a Stroke Support Group that can help survivors and family members adjust to the new normal. For more information, call 949-764-6066. (See page 67.)

Talk to your doctor about your symptoms and ask for help coming up with a plan to treat your depression.

Medications To Help Manage and Prevent Stroke

Stroke is one of the leading causes of serious long-term disability in the United States. To reduce your risk of recurrent stroke, it is important to modify your “risk factor profile.” This includes reducing your cholesterol, abstaining from smoking and excessive alcohol consumption, and treating your high blood pressure. Eating healthy and exercising regularly can also reduce the risk of cardiovascular complications.

There are many different medications that can help to reduce these risk factors. HMG-CoA Reductase Inhibitors and Niacin can help reduce your cholesterol. ACE Inhibitors as well as Beta Blockers can assist in reducing high blood pressure. And because the clumping together of platelets are integral processes in stroke, antiplatelet drugs are key pharmacologic therapies to prevent stroke recurrence.

With the right treatment and some changes in daily life, most people with stroke feel better and can lead happier, healthier lives. Everyone’s situation is different—certain treatments that fit one person’s situation won’t be right for another’s. Patients and their families should talk with their physician about the most appropriate treatment options. This section reviews some of the medications used to treat this condition.

Medication	Information
Antiplatelet Medications ☐ Aspirin ☐ Enteric Coated Aspirin ☐ Clopidogrel (Plavix) ☐ Aspirin/Dipyridamole (Aggrenox)	**What they do** Antiplatelet medications are used to inhibit the formation of blood clots by preventing platelets from sticking together. **Benefits** Antiplatelet medications are effective in reducing the risk of stroke by preventing the formation of blood clots and also offer a protective effect against heart attacks and strokes. **Things to watch for:** • Easy bruising • Persistent stomach pain. • Signs of bleeding, such as blood in vomit, urine or stool. • Aggrenox can also cause side effects such as headache, flushing, and occasionally yellowing of the eyes or skin – notify your doctor right away if you have this side effect.

Medication	Information
Anticoagulation Medications "Blood Thinners" ☐ Warfarin (Coumadin) ☐ Apixaban (Eliquis) ☐ Rivaroxaban (Xarelto) ☐ Edoxaban (Savaysa) ☐ Dabigatran (Pradaxa) ☐ Enoxaparin (Lovenox)	**What they do** Anticoagulant Medications (Blood Thinners) work in the body to slow blood clot formation. Warfarin competes with Vitamin K to slow clot formation by reducing the action of blood clotting factors II, VII, and IX. Another class of anticoagulant medications has been approved by the FDA. Apixaban, Rivaroxaban, Edoxaban, and Dabigatran are in this class of medications. They work by reducing the circulation of blood clotting factors X, Xa, and Thrombin. Enoxaparin is a Low Molecular Weight Heparin that prevents and treats clots in blood vessels. It is given by an injection under the skin, usually on the front side of the stomach area. **Benefits** Reduces the potential for blood clot formation and therefore reduces the risk of stroke recurrence. **Things to watch for:** • Unusual bruising or bleeding. • Signs of bleeding, such as blood in vomit, urine or stool. • Maintain a steady diet and avoid heavy alcohol consumption • Check with your doctor or pharmacist for any drug interactions with Anticoagulant Medications, even over-the-counter and "herbal" non-prescription products. **Vitamin K and Warfarin (Coumadin)** The Vitamin K content of foods you consume may have an important effect upon your therapy with Coumadin. It is important to avoid or limit foods that are high in Vitamin K while taking Coumadin. Discuss specifics of your diet with your doctor or dietitian. Food sources that are high in Vitamin K: Turnip greens, soybeans, soybean oil, Brussels sprouts, lettuce, cauliflower, cabbage, broccoli, spinach, liver, and green tea. Food sources that have a moderate amount of Vitamin K: Asparagus, corn oil, watercress, tomatoes, cheese, oats, butter, potatoes, bacon, egg yolks, whole wheat, coffee

Medication	Information
Ace Inhibitors ☐ Benazepril (Lotensin) ☐ Captopril (Capoten) ☐ Enalapril (Vasotec) ☐ Fosinopril (Monopril) ☐ Lisinopril (Prinivil, Zestril) ☐ Moexipril (Univasc) ☐ Perindopril (Aceon) ☐ Quinapril (Accupril) ☐ Ramipril (Altace) ☐ Trandolapril (Mavik)	**What they do** ACE Inhibitors prevent the body from forming angiotensin, a substance in the blood that causes vessels to narrow and raises blood pressure. By preventing the formation of angiotensin, your blood pressure is lowered, your heart's workload is reduced and the development of plaques is blocked. **Benefits** They help you by decreasing the formation of plaque, thereby allowing blood to flow easier. They can also reduce high blood pressure, which also lowers stroke risk. In studies, ACE Inhibitors have been shown to reduce mortality, heart attacks, strokes, heart failure, as well as diabetes-associated complications. **Things to watch for:** • Dizziness tends to occur with the first or second dose, and then goes away by itself. • If you experience a persistent dry cough, which gets worse or becomes bothersome while taking ACE Inhibitors, contact your doctor. • Swelling of the face or tongue; call your doctor if this occurs. • Can be taken without regard to meals.
Angiotensin II Receptor Blockers (ARB) ☐ Atacand (candesartan) ☐ Avapro (irbesartan) ☐ Benicar (olmesartan) ☐ Cozaar (losartan) ☐ Diovan (valsartan) ☐ Micardis (telmisartan)	**What they do** ARBs work by blocking the effect of angiotensin II, a chemical that narrows blood vessels and raises blood pressure. This effect helps to widen blood vessels allowing blood to flow more easily to lower blood pressure. ARBs are sometimes prescribed for people who cannot tolerate ACE inhibitors. **Benefits** ARBs are used to treat high blood pressure, heart failure, kidney failure associated with diabetes, and chronic kidney diseases. Lowering blood pressure can reduce your risk of stroke. **Things to watch for:** • Dizziness or lightheadedness upon standing. This effect is usually strongest with the first dose, especially if you are taking a diuretic (water pill). Call your doctor if it is persistent or severe. • If you experience a persistent dry cough, which gets worse or becomes bothersome while taking ARBs, contact your doctor. • Elevated potassium levels (hyperkalemia) follow your doctor's recommendations for lab monitoring. • Swelling of the face or tongue, call your doctor if this occurs. • Do not take ARBs if you are pregnant or plan to become pregnant.

Medication	Information
Beta-Blockers ☐ Atenolol (Tenormin) ☐ Bisoprolol (Zebeta) ☐ Carvedilol (Coreg) ☐ Metoprolol (Toprol XL, Lopressor)	**What they do** Beta-blockers reduce the heart's tendency to beat faster. They block the effects of chemical messengers in the body that cause the heart to work harder and increase blood pressure. This allows your heart to maintain a slower rate and helps keep it from getting weaker over time. **Benefits** Beta-blockers may reduce the energy needs of the heart, and when tolerated over a long time, may actually reduce heart size and improve the function of the heart. **Things to watch for:** • Dizziness. It usually occurs early in the treatment course, but goes away once your body adjusts. • Do not use beta-blockers if you have severe asthma or COPD, symptomatic bradycardia or advanced heart block without a pacemaker.
HMG-CoA Reductase Inhibitors ☐ Atorvastatin (Lipitor) ☐ Fluvastatin (Lescol) ☐ Lovastatin (Mevacor) ☐ Pravastatin (Pravachol) ☐ Simvastatin (Zocor) ☐ Rosuvastin (Crestor) ☐ Ezetimibe/Simvastatin (Vytorin)	**What they do** HMG-CoA Reductase Inhibitors, otherwise known as the "statins," reduce the amount of cholesterol in the body. This is done by inhibiting the HMG-CoA reductase enzyme, which is an important step in producing cholesterol. **Benefits** HMG-CoA Reductase Inhibitors lower cholesterol and fats in the blood to help prevent heart attacks and strokes. They have an anti-inflammatory effect as well as an anti-atherosclerotic effect, which reduces plaque build-up and stabilizes plaque in the arteries. **Things to watch for:** • Muscle weakness. If you experience unusual muscle weakness, contact your physician immediately. • Do not eat grapefruit or drink grapefruit juice when taking these medications. • Limit alcohol intake as it can damage your liver and cause increased side effects.

Medication	Information
Niacin (Nicotinic Acid) ☐ Niacin (Nicobid, Niaspan)	**Cholesterol-Lowering Drugs** **What they do** Niacin decreases the amount of LDL, the “bad cholesterol,” by blocking its production. Niacin also decreases Triglycerides (TG) and increases the amount of HDL, otherwise known as “good cholesterol.” **Things to watch for:** • Flushing. This may be reduced by taking niacin with meals and avoiding hot liquids or alcohol immediately after a dose. • Taking aspirin or Tylenol 30 minutes prior to niacin may also reduce the flushing. • Itching usually goes away after several weeks of therapy.
PCSK9 Inhibitors ☐ Alirocumab (Praluent) ☐ Evolocumab (Repatha)	**What they do** PCSK9 Inhibitors are a new type of medicine for lowering cholesterol. They are monoclonal antibodies that block the PCSK9 protein leading to a reduction in the amount of LDL "bad cholesterol." Most people will not need PCSK9 Inhibitors. It is reserved for people who cannot take statins and are extremely high risk for stroke or heart attack. These drugs are very expensive costing about $14,000 per year. **Things to watch for:** • Back pain. • Cold or flu symptoms. • Injection site pain, redness or bruising. • Allergic reactions, rash, swelling, trouble breathing. If you have these reactions get medical help right away.

Your Rehabilitation Program

Your rehabilitation program for continued recovery will be:

PROGRAMS	SERVICES	SETTING	FREQUENCY	LIKELY CANDIDATES
Acute care (inpatient) and rehab hospitals	24-hour medical care and a full range of rehab resources	Hospital or special rehab unit of a hospital	Several hours each day (most demanding)	Survivors who have many medical issues and may develop problems without continued medical treatment
Sub-acute facilities	Provide daily nursing care and a fairly wide range of rehab services	Rehab center, rehab unit of a hospital, skilled nursing facility (short-term nursing care) or skilled nursing home (long-term), skilled nursing unit in a hospital	Less demanding than acute programs, but continue for longer periods of time	Survivors who have serious disabilities but are unable to handle the demands of acute programs in a hospital
Long-term care facilities	One or more treatment areas	Nursing home, skilled nursing facility	2-3 days per week	Survivors who have their medical problems under control but still need 24-hour nursing care
Outpatient facilities	One or more treatment areas	Doctor's office, outpatient center of a hospital, other outpatient centers, and some adult day centers	2-3 days per week	Survivors who have their medical problems under control enough to live in their own homes and can travel to get their treatment
Home health agencies	Specific rehab services in one or more treatment areas	In the home	As needed – up to a few times a week	Survivors who live at home but are unable to travel to get their treatment

Rehabilitation: _____

Phone number: _____

Therapies:

☐ Physical therapy ☐ Occupational therapy ☐ Speech therapy

Durable Medical Equipment:

☐ Front-wheeled walker ☐ Bedside commode ☐ 3-in-1 (shower chair/over toilet/bedside commode)
☐ Hospital bed ☐ Other

Notes:

Personal Care

Hospital staff help patients re-learn activities of daily living through strengthening, coordination, use of assistive equipment and compensatory techniques if needed. After a stroke, patients may experience difficulty using their arms to perform familiar tasks such as eating, grooming, bathing and dressing. Specifically, the occupational therapist will assist you in re-learning self care techniques, possibly adapting clothing attire, and/or obtaining special devices for self-management assistance.

Eating/Chewing/Swallowing

The ability to feed oneself after a stroke may be impaired. You may have difficulty cutting food, using utensils or opening containers. This may be related to weakness, decreased coordination or paralysis. The occupational therapist will assist you in developing strength, coordination, and learning to use adaptive equipment.

Dysphagia is a term used to describe difficulty with swallowing. A patient may lack feeling or sensation in one or both sides of their mouth or have weak muscles in the throat, mouth or face. Your physician may consult a Speech Pathologist to evaluate and make recommendations regarding the appropriate diet texture for you. Sometimes certain textures are easier and safer to swallow to reduce your risk of material going into your airway or "down the wrong pipe." Ask your Speech Pathologist any questions before discharging and therapy is also available after you leave the hospital.

Dental Care

Due to the loss of muscle control and sensation, stroke patients are at high risk for dental problems. Risk factors may include food accumulation on affected side, accidental cheek or tongue biting, burns from hot food, dry mouth due to medications, loose or unclean dentures, and poor nutritional status. Oral care is important to prevent infections, clear extra germs that build up, and prevent choking from particles that may be in your teeth or cheeks. A thorough dental program may include brushing your teeth more often, frequent rinsing with water or use of an irrigating device, testing temperature of food before eating, adjusting and daily cleaning of dentures, and regular check-ups by dental professionals.

Activities

During hospitalization, your therapist may discuss your skills, abilities and interests with you and your family. They may provide treatment that will improve specific skills, assist you in developing new leisure interests/hobbies, and provide resources to promote your self-sufficiency and independence. Staying active and involved in pleasurable pursuits following a stroke is critical. Recreational activities can improve perception, coordination, strength, shift your attention from disability to ability, enhance your self-esteem and confidence, promote relaxation and distraction from pain, and facilitate socialization with others in society.

Discharge Planning

Prior to your discharge from the hospital, the case manager will obtain information from your physician and therapist on your discharge therapy needs. Depending on your status, home environment, social support and available transportation, a decision will be made whether you will have home therapy, be referred to outpatient therapy, go to a skilled nursing facility or acute rehab facility.

Mobility

Improving mobility can be a large focus of rehabilitation and this begins as soon as possible following a stroke. The treatment team will involve you and your family in setting realistic treatment goals in the areas of mobility. Goals are designed to meet your specific needs based on your prior level of independence, present level of impairment, home/community environment, help available for return home, and motivation for active participation in the therapy program.

Both physical therapists and occupational therapists will work with you in the areas of mobility, and family and/or caregiver training sessions will be arranged as need. All of the following activities may be modified to meet your unique needs:

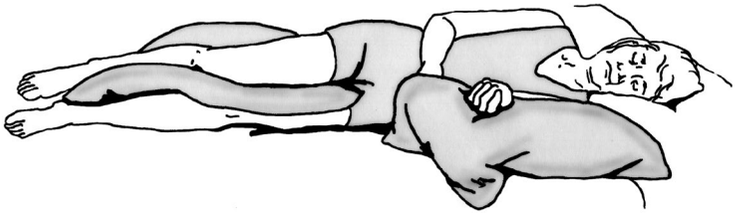
- Bed mobility training and bed positioning: rolling, using bedpan, getting in and out of bed.
- Transfer training: scooting, moving from bed to and from wheelchair/commode/chair, car transfers, sitting and standing to and from various heights and surfaces.
- Visual/perceptual alignment, facial and scanning exercises at a mirror
- Standing activities: weight shifting exercises, standing at sink for grooming and hygiene activities.
- Gait training/walking: walking on different floor surfaces with or without assistive devices, i.e., walker, cane, ankle brace.
- Stair training: walking up and down different size steps using rail(s), with or without assistive device.

Bed Positioning

Why Bed Positioning is Important

1. Minimizes pain on your affected side
2. Protects the joints on your affected side
3. Minimizes edema (swelling) in your affected arm or leg
4. Prevents contractures on affected side
5. Prevents skin breakdown

Positioning: Lying on Affected Side



ELEVATE AFFECTED ARM

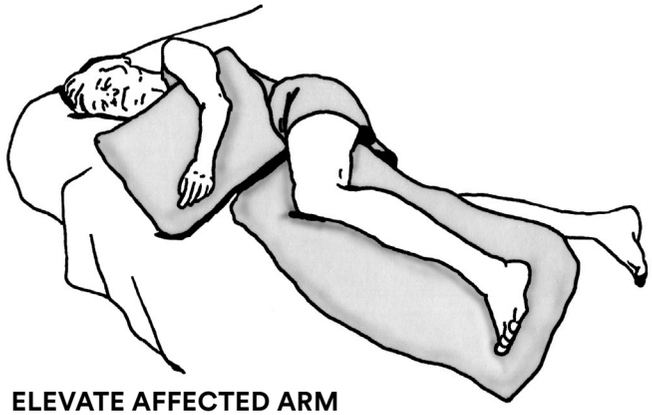
- Shoulder is positioned forward
- Elbow out and palm turned upward

POSITION AFFECTED LEG

- Hip and knee slightly bent
- Place other leg on pillow to support weight

MAY PLACE PILLOW BEHIND BACK

Positioning: Lying on Unaffected Side



ELEVATE AFFECTED ARM

- Shoulder is positioned forward
- Elbow straightened as able
- Hand with palm down

POSITION AFFECTED LEG

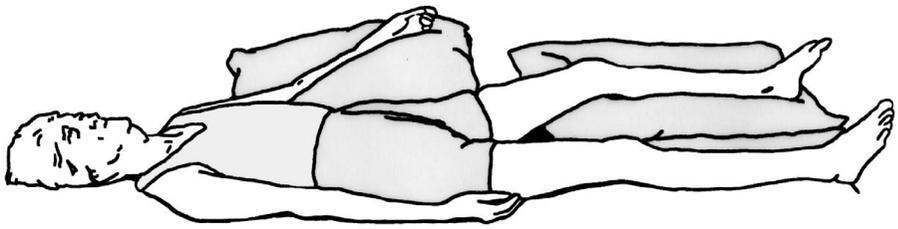
- Hip and knee slightly bent
- Toes pointing forward

MAY PLACE ANOTHER PILLOW BEHIND BACK TO SUPPORT TRUNK POSITION

Positioning: Lying on Back

ELEVATE AFFECTED ARM
- Shoulder is positioned forward, arm out to side
- Palm is turned upward as able

POSITION AFFECTED LEG
- Hip and knee slightly bent
- Toes pointing up as able
- Avoid tight tucking sheets
- May use footboard or cradle



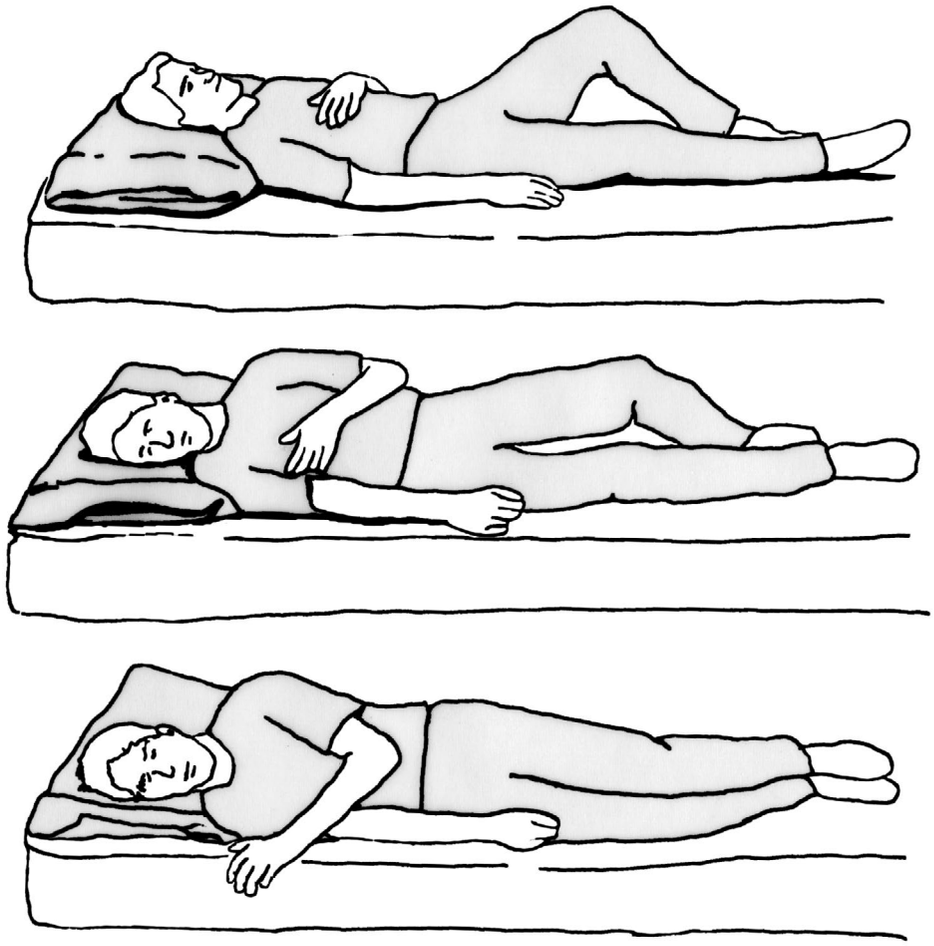
Getting In and Out of Bed: Log Roll

Lying on back, bend left knee and place left arm across chest. Roll all in one movement to right. Reverse for rolling to left. Always move as one unit.

PRECAUTIONS FOR THE AFFECTED ARM

Do:
- Keep affected arm across the body when rolling the patient from side to side.
- Keep the arm on a pillow with elbow slightly bent and palm at neutral when the patient is lying on their back in bed.
- When sitting, keep affected arm supported on a pillow. Encourage use of affected arm for support if able.
- Keep hand elevated to reduce swelling and increase awareness.

Do not:
- Pull from any part of the affected arm when rolling or turning the patient back to bed.
- Let affected arm hang at side without support during sitting and standing activities. Your therapist will evaluate the need for an arm sling.
- Let affected arm lay across the body when patient is resting in bed on their back for prolonged period of time.



Exercises

Your therapist will give you an individual exercise program and determine what exercises are appropriate for you. You may receive additional instruction at another facility, at home or as an outpatient. Appropriate exercises should begin as soon as possible to prevent joint contractures, pain, swelling, skin breakdown, and to reduce stiffness in the muscles and maintain/improve neurological connection between brain and muscle.

Passive Exercises: If you cannot move your affected limbs or can only move them a little, your therapist will instruct you, your family member or caregiver to move your limbs with you.

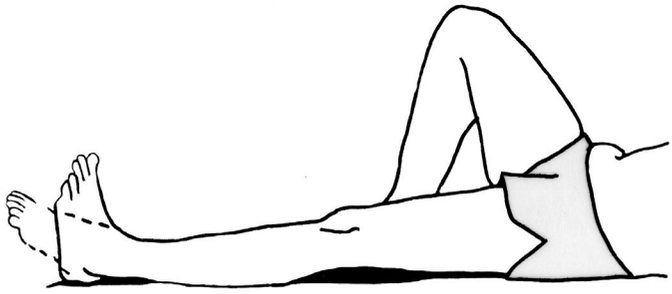
Active Exercises: These exercises are appropriate when you have some movement of the affected side.

Some Tips to Remember

- Never try to progress too rapidly.
- Do not hold your breath during exercise movements.
- Exercise on a regular basis. Keep a log of your exercises, include amount of exercise, date, time, and note any responses to exercises.
- Do not drink alcoholic beverages before exercising.
- Consult a physician if you experience any new symptoms.

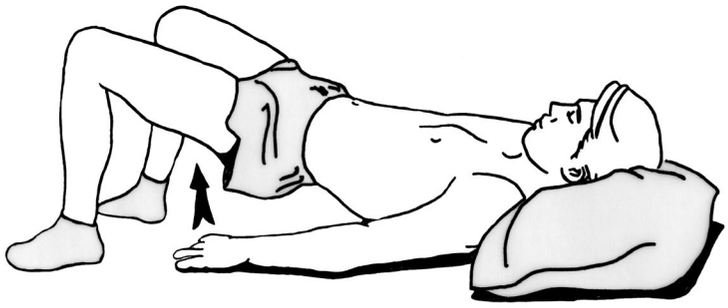
Ankle Pumps

Relax leg. Gently bend and straighten ankle while pulling toes upward. Move through full range of motion.



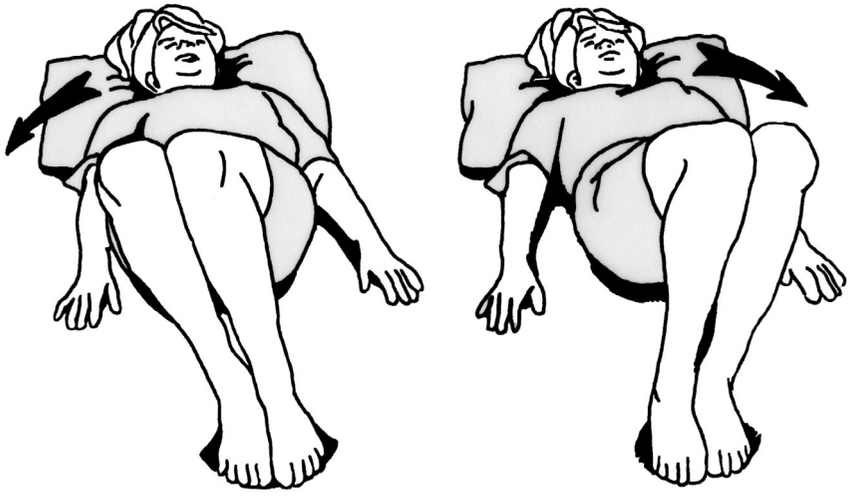
Bridging

Slowly raise buttocks off bed. Return to starting position. Do not hold your breath.



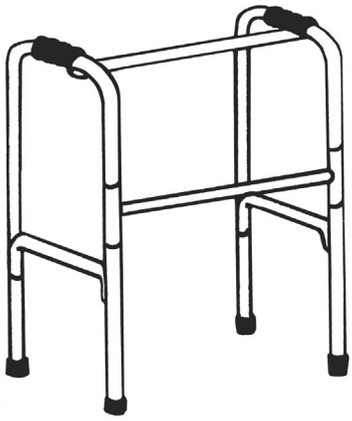
Trunk Rotation

Slowly rock knees from side to side, allow back to rotate slightly.

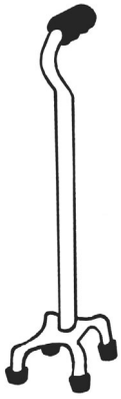


Gait Training/Walking

Your therapist will determine if you need an assistive device to walk safely. He or she will instruct you on how to use it.



Walker



Quad Cane

Hemi-Walker

Standard Cane

Bracing

You may need to use an ankle-foot orthosis (AFO) with walking to prevent your toes from dragging on the floor (if your ankle is weak) or to help stabilize your knee (if your thigh muscles are weak) and/or a hand splint for a front wheel walker to include affected arm and more normal movement and facilitation. Your therapist will communicate with your physician if you need a brace or splint.

Spasticity Management

Spasticity is uncontrollable muscle tightness in an arm or leg that can cause pain and affect movement. The involuntary muscle contraction of spasticity is a common physical response to the brain injury caused by a stroke. If the brain injury resolves and voluntary movement returns, spasticity may diminish, restoring the usefulness of the limb. Spasticity usually coexists with weakness.

Symptoms of Spasticity

- Stiffness in the arms, fingers or legs
- Painful muscle spasms
- A series of involuntary rhythmic contractions and relaxations in a muscle or group of muscles that leads to uncontrollable movement or jerking, called clonus
- Increased muscle “tone”
- Abnormal posture
- Hyperexcitable reflexes

Methods to Decrease Spasticity

- Proper positioning of the arm or leg
- Stretching
- Weight bearing through affected arm or leg
- Splinting
- Medications (possible medications: Baclofen (Lioresal), Zanaflex, Valium, Danthuim)

Home Safety Tips

Flooring

- Remove rugs that can be easily tripped on, especially at top and bottom of stairways.
- Make sure rugs have non-skid backings.
- Make sure rugs and carpets are free of curled edges, worn spots and rips.
- Secure electrical cords out of the way. Consider using a cordless phone.
- Eliminate uneven surfaces and obstacles from pathways both outside and inside the home.
- Have mats at doorways for people to dry their feet on to prevent slipping.

Bathroom

- Make sure grab bars or safety rails are securely anchored over the tub, in the shower and near the toilet.
- Use a nonskid rug on the bathroom floor.
- Use of a raised toilet seat or commode with arms may be necessary.
- Keep toiletries in an easy to reach receptacle.

Lighting

- Maintain adequate lighting in all areas, eliminate shadowy areas.
- Use night-lights in bathrooms or in hallways.
- Motion-sensored lights eliminate need to remove hand from assistive device.
- Check to make sure light switches are within easy reach, at proper height, and may be illuminated for nighttime.

Furniture

- Sit in chairs with arm rests to help you get in and out of the chair.
- Place firm cushion or pillow on seat of chair or couch to elevate.
- Use a sturdy step stool to reach items in high cupboards or closet shelves.
- If you are not confident using a step stool or ladder, DO NOT use them. Get help.
- If you must use a ladder, make sure the ladder is in good condition, fully opened and on a firm, level surface. Place each foot securely on the step. Do not stand on top of the ladder.

Stairs

- Make sure handrails are securely fastened. If you have a large flight of stairs separated by a landing, place a chair with arm rests there to allow you to rest half way up.
- Mark the top and bottom of stairs with contrasting tape.

Footwear

- Select footwear that stays securely on feet, with soles that are not slippery.

Assistive Devices

- Make sure the equipment is in good working condition and adjusted to the proper height.
- Make sure the rubber tips of the crutches, canes and walkers are in good condition.
- Do not try to carry anything in your hands while you are using a walker. Consider the use of a walker bag or pockets.

Energy Conservation

- Store frequently used items at waist level or within arm's reach.
- Store commonly used items on upper shelves of refrigerator.
- Use a lazy Susan, or adaptive equipment (reachers) for easier reach. Instead of lifting heavy items, slide them across the counter.
- Allow yourself extra time to get ready and spread out tasks throughout the day.
- Take several rest breaks and sit when necessary.
- Plan ahead.
- Sit to perform tasks instead of standing.
- Activity pacing.
- Minimize leaning over to put on clothes/shoes – bring foot up to your knee.

Personal Precautions

- If you live alone, have daily contact with a family member, friend or neighbor.
- Keep your glasses prescription up-to-date.
- Be alert for unexpected hazards, including children, pets, out of place furniture and toys.
- Avoid rushing to answer the phone or doorbell.
- When carrying bulky objects, make sure your vision is not obstructed.
- Do not carry items that are too heavy; check the weight of the item first.
- Do not turn or twist your back to reach or lift an object. It is much easier to move closer or turn your whole body and feet towards a wanted object, rather than risk losing your balance.
- Take time to regain your balance and reduce dizziness when you change positions, i.e., going from lying down to sitting and sitting to standing.
- Be aware of medications, their interactions and side effects.
- Consider Life Alert.
- Always have a phone with you.

No Such Word As "Can't"

As a stroke survivor, I know the value of listening to one's therapists and following their instructions. I arrived at rehabilitation unable to speak and with my right side paralyzed. Since I had been a writer, photographer, lecturer, college instructor and wildlife rehabilitator for over 20 years, you can imagine how frustrated I was!

First came an evaluation, which tested everything from sight and hearing to balance and movement. Then came concentrated work on what I could do, followed later by what I might be able to do with extra effort and work.

Each stroke survivor is different. No two are quite alike. Our rates of progress will vary; some slower, some faster. Many of us will not be able to achieve as much as we'd like. But the most important thing for us is to try!

We will make gains only if we are willing to work at it. If you will not heed your therapist's advice...if you refuse to attempt the necessary movements...if you turn a deaf ear and sit or lie practically comatose...you hurt yourself most of all, but you also hurt your family, friends and all those who care about you.

Therapy can hurt or be repetitious and sometimes boring, and our gains may seem minuscule or even nonexistent, but without the effort, we shall certainly have no gains at all.

Through the guidance of all the therapists: occupational, physical, speech, cognitive, retraining, pool, recreation, and psychology, I have come a long way and am, I feel, productive again.

There must be no place for the word "can't" in your vocabulary. Perhaps you "don't want to right this minute" or you wonder, "How can I accomplish this task?" But keep trying. FIND A WAY. The therapists will guide you.

Try aiming for small goals, ones that you and your therapists feel are attainable. With each little success, your confidence will build.

When you eventually reach a plateau from which your rate of improvement is considerably reduced, you must then accept the hand (pun intended) that fate has dealt. To deny your limitations, to refuse to accept the fact that you are no longer quite the same person, may be condemning yourself to a life of bitterness and negativism. Never forget that life is a precious commodity...treasure it, whatever your limitations may be.

Rosemary K. Collett
Stroke Survivor

Introduction to Healthy Eating

This nutrition section was specially prepared for you with a great deal of thought and care to provide you with the most up-to-date source of information about healthy eating after stroke. We hope you find the information useful to help you make healthy adjustments in your diet. You are invited to call any of our dietitians to ask specific questions about your needs including food purchasing, eating out at restaurants, or even food preparation. Remember, we are here to help YOU! Best wishes and healthy eating!

Healthy Eating After A Stroke

1. Food Texture

After some strokes, swallowing may be difficult. The term “dysphagia” means difficulty swallowing. The purpose of the “dysphagia diet” is to start with foods that are easiest to manage. It is recommended to follow the guidelines for texture modification provided to you by your Speech Language Pathologist.

2. Decrease Total Fat

Most Americans currently eat more than 40 percent of their calories from fat. The goal is to decrease that level to 30 percent or less of your total calories.

- Use non-fat or 1% milk in place of whole milk and limit the use of high fat cheeses and ice-cream.
- Cut down on the amount of fat you add to food, such as: butter, margarine, lard, oils, salad dressing, sour cream, whipped cream, etc.
- Control meat/poultry/fish portions to no more than 6 oz. per day.
- Bake, broil, BBQ, or boil foods to reduce fat.
- Trim the fat from your meat and take the skin off your chicken, before cooking.
- For vegetables: Try steaming, roasting, or grilling directly on the grate or in foil.
  - Spray with a non-stick pan spray.
  - Pan fry using a non-stick spray.

3. Decrease Cholesterol and Saturated Fat

- Eggs: Limit your egg intake to three egg yolks per week.
- Meat: Eat more lean fish and poultry and less red meat. Try eating more meatless meals, which are usually lower in fat and calories and higher in fiber.
- Decrease Saturated and Hydrogenated trans fats: Choose soft butter/oil spreads or margarine without hydrogenated oils to reduce your intake of saturated fat and cholesterol.
- Choose vegetable oils over animal fats, such as canola oil and olive oil.

4. Increase Complex Carbohydrates

Increase complex carbohydrates, which are rich in fiber, vitamins and minerals, and relatively low in fat and calories.

- Whole Grains: Use whole wheat or grain flour and bread, bran bread/cereal, oatmeal/oat bran, brown rice, barley, corn meal, rye, buckwheat, and experiment with any other whole grains.
- Fruits and Vegetables: Choose those especially with an edible peel or seeds, such as: apples, berries, broccoli, green leaf lettuce, peaches, pears, and potatoes. Eat the whole fruit rather than drinking the juice.
- Legumes: Try dried beans, peas and lentils.
- Limit your intake of simple carbohydrates, such as sweets and sugar. These foods contain few nutrients and are high in calories.

5. Maintain Desirable Weight

EXERCISE IS KEY

- Choose your favorite daily exercise, such as walking, bicycling or swimming as approved by your physician. Experts recommend 30 minutes a day, 3-5 times per week.

NOTE: Consult with your physician before starting any exercise program.

If overweight, follow these guidelines:

- Decrease sugar
- Decrease fat
- Decrease portions
- Decrease alcohol

6. Reduce Salt/Sodium Intake

Americans eat an average of 5000-8000 milligrams of sodium each day. The American Heart Association recommends an intake of 2,000 milligrams of sodium each day. Follow these tips to reduce the amount of salt in your diet.

- Eliminate the salt shaker from the table.
- Omit salt and high sodium containing food products when preparing foods.
- Decrease use of convenience foods containing excessive sodium. Sodium compounds are often used to extend shelf life, improve taste or color, and speed up cooking time. This may include frozen dinners, canned soups, hot dogs, and instant or processed foods.

7. Increase Potassium

Increasing the level of serum potassium has been shown to increase sodium excretion. The following are good sources of potassium and should be included daily:

- Oranges
- Broccoli
- Potatoes
- Spinach/Greens
- Asparagus
- Beans
- Tomato products
- Melons
- Dried fruit
- Pumpkin
- Bananas

8. Maintain Normal Blood Pressure

DECREASE ALCOHOL

- Alcohol consumption has been shown to elevate blood pressure, and it is often difficult to achieve control in persons with a high alcohol intake. If you have high blood pressure or are taking blood pressure medications, you should discuss your alcohol consumption with your physician.

LIMIT CAFFEINE

- Caffeine may raise blood pressure for approximately two hours after it is consumed.Excessive caffeine may cause prolonged elevation in blood pressure.

INCREASE CALCIUM

- Many studies have shown that individuals with hypertension consume inadequate amounts of calcium. Therefore, blood pressure may improve by increasing dietary calcium.
- The following foods are rich in calcium and should be eaten daily:
  - Milk (Nonfat or 1% lowfat milk is slightly higher in calcium than whole milk)
  - Yogurt
  - Cheese (choose those with less than 6 grams of fat/oz.)
  - Salmon (canned with bones)
  - Broccoli
  - Tofu

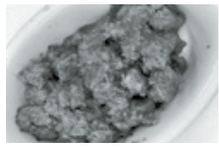
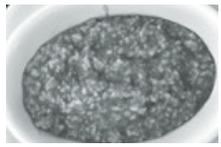
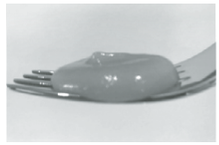
IDDSI (International Dysphagia Diet Standardization Initiative)

The IDDSI Diet was a collaboration of experts throughout the world to standardize textures to improve safety for patients with dysphagia. The recommendation of the IDDSI level is made by Speech Therapy or the physician as swallowing abilities are determined. Foods flow down towards the point of the pyramid, while liquids flow up towards the point of the pyramid.

How to use the IDDSI Pyramid

The left side (Foods) of the pyramid reflects the most solid level allowed and can be served the lesser textures.

The right side (Drinks/Liquids) of the pyramid reflects the minimum level of liquids provided and can be served any of the thicker textures, unless limited by the left side of the pyramid.

RECOMMENDED TEXTURE	BRIEF OVERVIEW
Easy to Chew	- This diet is intended to provide foods that can be safely swallowed/ chewed and may be used as a transition to a regular diet. - Foods are soft enough to break apart into smaller pieces with a fork or spoon. - Dry, crusty, sticky, chewy, or crunchy foods are not allowed 
Soft & Bite-sized	- This diet consists of foods that are soft, tender and moist, but with no thin leaking/dripping from the food - Gravies and sauces are incorporated into the foods offered on this diet - Diet **requires** 'bite-sized' pieces (**no bigger** than 1.5 cm x 1.5 cm -or- 0.59 inches) that are safe to swallow - Food can be mashed/broken down with pressure from fork - A knife is **not** required to cut this food - Dry, crusty, sticky, chewy, or crunchy foods are not allowed 
Minced & Moist	- This diet consists of foods that are soft and moist, but with no thin leaking/dripping from the food - Gravies and sauces are incorporated into the foods offered on this diet. - Biting is **not** required - Minimal chewing is required - Lumps of 4 mm -or- 0.16 inches in size that can be mashed with the tongue  - Food can be easily mashed with just a little pressure from a fork - These foods may be scooped onto a fork with no liquid dripping and no crumbs falling off the fork - Dry, crusty, sticky, chewy, or crunchy foods are not allowed
Pureed	- This diet consists of foods that have a smooth texture with no lumps and are usually eaten with a spoon - Pureed foods can hold a shape on a spoon and falls off in a single spoonful - Gravies and sauces are incorporated into the foods offered on this diet. - Pureed foods do **not** require chewing - Dry, crusty, sticky, chewy, or crunchy foods are not allowed  **Examples of allowed foods:** - Pureed meats, poultry, fish, that are prepared, moistened, tender with sauces incorporated - Foods that are pureed, smooth, without liquids separating
Liquidised	- Liquidised is considered a food (not liquid) - Liquidised can be eaten with a spoon or consumed from a cup - Liquidised **cannot** be eaten with a fork because it drips through the fork prongs - Liquidised has a smooth texture with no 'bits' (lumps, fibers, husk, bits of shell or skin, particles of gristle or bone) - Liquidised foods may be used for those patients who may have trouble moving their tongue. - The thicker consistency gives more time for the tongue to "hold and move" the liquidized food. - Please consult your Speech Language Pathologist and Registered Dietitian if this is your recommended diet.

RECOMMENDED CONSISTENCY	BRIEF OVERVIEW OF LIQUID CONSISTENCIES
Extremely Thick	- Usually eaten with a spoon - Cannot be consumed from a cup or sucked through a straw - Do not require chewing - Have a smooth texture with no lumps - Hold shape on a spoon and fall off spoon in a single spoonful when tilted - Are not sticky
Moderately Thick	- Can be consumed from a cup or taken with a spoon - Some effort is required to suck through a standard bore or wide bore straw (**wide** bore straw = 0.275 inch or 6.9 mm) - Have a smooth texture with no lumps, fibers or seeds
Mildly Thick	- "Sippable" - Pours quickly from a spoon, but slower than thin drinks - Need some effort to drink this thickness using a standard straw
Slightly Thick	- Thicker than water - Slightly thickened liquids can be taken through a straw or standard cup
Thin Liquids	- Flows through a straw, syringe - Thin liquids can be taken through a straw or standard cup

What Is Thickener?

Thickener is a powder/gel that can be added to all fluids (including carbonated beverages, soups, sauces, liquidized food, alcohol, etc.) It does not add any nutritional value.

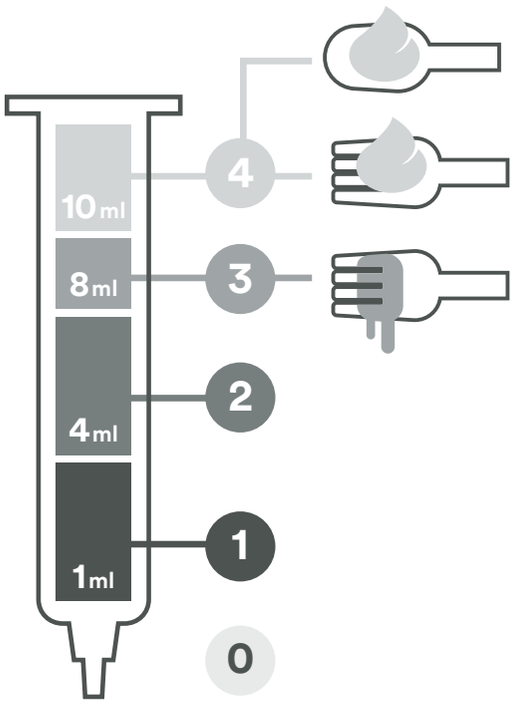
SOME THICKENING BRANDS INCLUDE:	WHERE DO I FIND THICKENING LIQUIDS OR THICKENER?
- Hormel Thick & Easy® - RESOURCE® THICKENUP® - SimplyThick® (simplythick.com) - Thick-it® - Nutra Balance Thick & Clear®	- www.amazon.com - www.allegromedical.com - www.brucemedical.com - www.dysphagia-diet.com - Costco - CVS pharmacy - Walgreens - Rite Aid

How Do I Thicken Liquids?

Thickeners come in gels or powders. You can also purchase pre-packaged thickened liquids. Each gel/powder will have exact directions on the packaging as to how much of each substance to place in a liquid to achieve the desired consistency.

- Make sure you follow the directions on the thickener packets EXACTLY as they are listed (with the proper amounts of thickener to liquid ratio and the method of how to mix the two.)
- If you are unsure if something is the correct thickness, you can test it using the 'IDDSI flow test.' Please refer to **http://iddsi.org/framework/drink-testing-methods/** for instructional videos.
- The IDDSI Flow Test measures how thick a liquid is by measuring how much liquid is left in a 10mL syringe after 10 seconds.

Thin Liquid	0 mL remaining in the syringe
Slightly Thick	1-4 mL remaining in the syringe
Mildly Thick	4-8 mL remaining in the syringe
Moderately Thick	8-10 mL remaining in the syringe
Extremely Thick	No flow test. Cannot be drunk from a cup because it does not flow, usually eaten with a spoon, falls from spoon in a single spoonful when tilted, holds its shape on a plate.

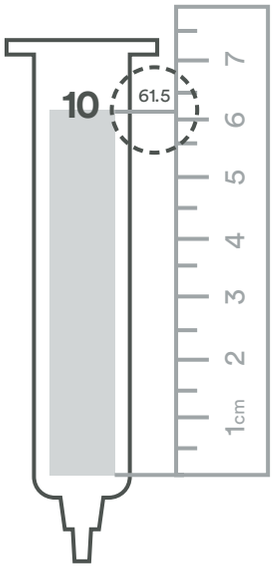


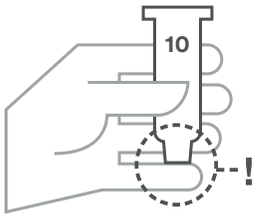
IDDSI Flow Test Instructions

Before You Test

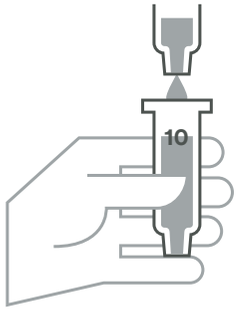
You **must check** your syringe length because there are differences in syringe lengths. Your syringe should look like this.

Length of
10 mL scale = 61.5 mm

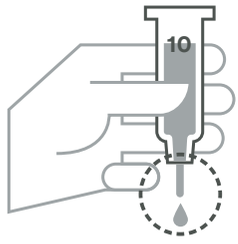




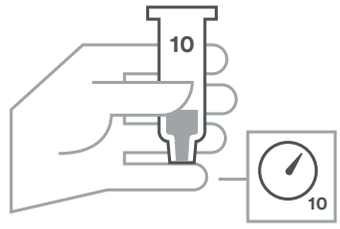
1. Remove plunger



2. Cover nozzle with finger and fill 10 mL



3. Release nozzle & start timer



4. Stop at 10 seconds

Fat Facts

Fat is one of the three major energy sources in food. A concentrated source of calories – about nine calories per gram – fat is found in foods from the fat and meat categories of foods. Some kinds of milk products and starch/bread categories also contain fat.

Types Of Fat

Cholesterol

IN THE BLOOD

- This is a wax-like substance, which is manufactured by the liver and needed for the normal function of all systems in the body. A high level (above 200 mg/dl—some studies show above 180 mg/dl) has been shown to be a major risk factor in developing heart disease (including high blood pressure, obstruction of the heart or brain vessels, and hardening of the arteries). There are different forms of cholesterol, of which, there is one that is considered "good." The others are considered "bad."

The primary two we monitor:

- HDL cholesterol – "good" cholesterol, acts as a scrubbing bubble of the arteries to remove the plaques that are forming
- LDL cholesterol – "bad" cholesterol, lays down the plaques that cause the blockages

What causes the blood values to be elevated?

- Eating foods high in saturated fat, trans fat, and cholesterol
- Weight above desirable level
- Lack of exercise
- Hereditary factors

IN THE DIET

- Only found in animal products. Limit intake of the following foods: egg yolks, beef, pork, lamb, duck, sausage, cold cuts, organ meats, etc.

Saturated Fat and Trans Fat

THE DIETARY EFFECTS

- Tends to increase total blood cholesterol levels
- Usually found in animal foods (i.e. dairy, meat), but also found in some plant foods (i.e. palm oil, coconut oil, cocoa butter)

HYDROGENATED OR TRANS FAT (A TYPE OF SATURATED OR PARTIALLY-SATURATED FAT)

- Hydrogenation is a food production process that changes a liquid (or unsaturated fat) into a solid fat (or saturated fat), often for the purpose of extending shelf life of the product fat.
- Examples: shortening, stick margarine

Polyunsaturated Fat

- Tends to lower total cholesterol (LDL and HDL cholesterol)
- Mostly found in plant foods
- Generally liquid at room temperature. Examples include corn oil, safflower oil, cottonseed oil, sunflower oil, and some other vegetable oils.

Monounsaturated Fat

- Tends to lower the "bad" (LDL) cholesterol and have no effect on the "good" (HDL) cholesterol
- Only found in plant foods
- Examples include canola oil, olive oil, avocados, and nuts

Triglyceride

- A triglyceride is a fat found in food and manufactured by the body from excess sugar, fat, alcohol, or excess quantities of food at one meal.

Analysis of Lipid Profile

The following is a comparison of your cardiac lipid (fat) profile to accepted, desirable ranges. Attaining lipid profiles, as close to desirable levels as possible, should help decrease your chances of coronary heart disease.

For every:
one percent decrease in blood cholesterol, there is a...
two percent reduction in coronary artery disease risk.

Your levels on (indicate dates below)...

Date:	Date:	Date:	Date:	Lipid Categories: Desirable Level
				Cholesterol: less than 200 mg/dl (Some studies show <180 mg/dl)
				Low Density Lipoprotein (LDL): less than 100 mg/dl
				High Density Lipoprotein (HDL): 40-60 mg/dl
				Triglycerides: less than 150 mg/dl
				Total Cholesterol/HDL Ratio: less than 3.5

Healthy Substitutions to Reduce Fat

How to Reduce Your Fats: The Hit-'n'-Switch List

INSTEAD OF	CHOOSE THESE
Whole milk	• Nonfat milk • Lowfat milk (1% or extra light preferred) • Evaporated skim milk–diluted • Reconstituted nonfat milk
Cream	• Evaporated nonfat milk–undiluted • Nonfat milk
Whipped cream	**Whipped Evaporated Milk** Place undiluted evaporated skim milk in an ice cube tray. Place in the freezer until ice crystals form around the edges. Chill bowl and beaters. Place milk in chilled bowl and beat to desired consistency. **Whipped Topping** 1/2 cup water 1 Tbsp. lemon juice 1/3 cup dry nonfat milk powder 2 Tbsp. sugar (or sugar substitute equivalent) 1/2 tsp. vanilla Place all ingredients in a bowl. Place in refrigerator until well chilled. Beat until stiff peaks form.
Cream cheese	• Commercial fat-free cream cheese • Neufchatel cream cheese (limited amount) **Cream Cheese Substitute** Line a colander or sieve with cheese cloth. Pour in low-fat yogurt. Cover loosely and let drip in the refrigerator for 12 to 24 hours. This works well in cheesecake and other recipes calling for cream cheese.
Baking chocolate (1 ounce)	Try this substitution: 3 Tbsp. cocoa + 1 Tbsp. oil

INSTEAD OF	CHOOSE THESE
Buttermilk	Recipe: For each cup of buttermilk, place 1 Tbsp. lemon juice or vinegar in a measuring cup. Fill to 1 cup level with nonfat milk. Let stand for about 5 minutes. Stir.
Butter, margarine	• Light spread (tub only) • Margarine without hydrogenated oil • Butter/oil spreads
1 whole egg	• 2 egg whites or 1/4 cup commercial cholesterol-free egg substitute or 1/4 cup homemade egg substitute **Egg Substitute** 1 dozen egg whites 1/2 cup nonfat dry milk powder 2 or 3 drops of yellow coloring (if desired) Mix together in a covered jar and store in the refrigerator. Good for omelettes, scrambled eggs, french toast, etc. To use for baking, add 1 tsp. oil for each 1/4 cup of mix. 1/4 cup of mix is equal to 1 large egg.
Sour cream	• Commercial non-fat sour cream **Sour Cream Substitute** 2 Tbsp. nonfat dry milk powder 1 Tbsp. lemon juice 1 cup large curd cottage cheese Wash cheese in strainer and let drain well to remove all cream. Combine ingredients. Whirl in blender until smooth. **Mock Sour Cream** Blend equal parts of low-fat cottage cheese and low-fat yogurt in a food processor until smooth and thick. **Yogurt Sour Cream** Plain low-fat yogurt works well as a substitute for sour cream on such things as baked potatoes. To use yogurt as a sour cream substitute in sauces, add 2 Tbsp. of flour for each cup of yogurt so the sauce will thicken properly and not curdle.

How to Reduce Your Fats: The Hit-'n'-Switch List

INSTEAD OF	CHOOSE THESE
Hot chocolate	• Commercial cocoa mix (read labels) **Hot Cocoa Mix** 1 cup nonfat dry milk powder 1/3 cup unsweetened cocoa powder 3 Tbsp. sugar Mix ingredients and store in an airtight container. To use, put 2 heaping teaspoonfuls of mix into a cup and add hot water. Stir well. If desired, add a dash of vanilla.
Ice cream	• Frozen low-fat or nonfat yogurt, fruit ices, sherbet, sorbet
Cheese	Use low fat (or fat free) cheese such as mozzarella, farmers, ricotta, parmesan, port du salut, or other low fat cheeses with 2 to 6 gms fat/ounce
Soy sauce	• Reduced sodium soy sauce (read label), coconut aminos, or liquid aminos
Ground beef	• Ground turkey, chicken or veal
Baked goods	• Home baked goods using egg substitute, egg whites, canola oil, reduced sugar and salt • Use commercially baked fat-free goods
Cream soup	• Use nonfat milk and thicken as with white sauce recipe (See "white sauce").
Oil-packed tuna	• Water-packed tuna
Peanut butter	• Use the "old-fashioned" style of peanut butter and pour off the oil • Natural, reduced-fat peanut butter
White rice	• Brown rice • Barley • Quinoa

INSTEAD OF	CHOOSE THESE
Crackers	• Low fat rice crackers, melba toast, rye crackers **Tortilla Triangles** Cut corn tortillas into 8 triangles. Place on baking sheet and bake at 425 degrees until crisp and dry. Great with salsa!
White sauce	**White sauce** 1 cup nonfat milk, 2 Tbsp. flour Pour nonfat milk into a jar with a lid. Add flour, cover and shake vigorously until smooth. Pour into a pan and cook over low heat until thickened, stirring constantly. Add pepper and a dash of salt. This makes a medium sauce. For a thinner version use just 1 Tbsp. of flour. For a thicker sauce add 3 Tbsp. of flour for each 1 cup nonfat milk. To add more flavor, use onion or garlic powder, thyme, or any other appropriate seasoning.
Gravy	**Gravy** Use about 1 Tbsp. flour for every 1/2 cup liquid. You may use fat-free beef, chicken or turkey broth. Meat drippings may be used for added flavor. Add ice cubes to the drippings to harden any fat; remove the fat and use only the remaining liquid. Put half of the liquid you are using for your gravy in a jar with the flour. Cover and shake until mixture is smooth. Pour into a pan with the remaining liquid. Bring to a simmer and cook for a few minutes, stirring constantly. Season to taste. Gravy may be made with browned flour (for color) or brown gravy coloring may be added. **Browned flour** Place flour in a shallow baking pan, spreading it out evenly to a depth of about 3/4". Cook in a very low oven, stirring occasionally, until lightly browned. Store in a covered jar in the refrigerator. Keeps indefinitely.

How to Reduce Your Fats: The Hit-'n'-Switch List

INSTEAD OF	CHOOSE THESE
Salad dressings	• Fat free or low-fat commercial dressings **French Dressing** 6 Tbsp. garlic flavored wine vinegar 4 Tbsp. cold water ¼ tsp. each of pepper and dry mustard ¼ cup canola oil Put all ingredients in a covered jar. Shake well. Chill. Makes about 12 servings. **Red French Dressing** ½ cup canola oil 2 Tbsp. vinegar 2 Tbsp. lemon juice ½ tsp. each of dry mustard and paprika few grains coarse pepper ¼ cup mayonnaise ¼ cup catsup or tomato paste ¼ tsp. Worcestershire sauce Mix all ingredients together and shake well. Chill before using. This is especially good on plain lettuce or on a vegetable salad. Makes 1¼ cups. **Dressing "Ranch Style"** One package commercial "ranch style" dressing mix Use plain lowfat/nonfat yogurt as a substitute for the mayonnaise, sour cream, or buttermilk called for on the package. (This is still high in sodium, but the fat, calories and cholesterol are reduced.) **Cottage cheese dressing** 1 cup cottage cheese ⅓ cup buttermilk Place cottage cheese in a sieve and wash lightly in cold water. Let drain thoroughly. Combine cottage cheese and buttermilk. Whirl in blender. Add more buttermilk if a thinner dressing is desired. **Variations:** **Bleu Cheese:** Add 1 Tbsp. bleu cheese and some pepper to taste. **Italian:** Add oregano, garlic powder and onion powder to taste. **Mock Thousand Island:** Add 2 Tbsp. chopped green pepper and 1 Tbsp. tomato paste. **Pepper Dill:** Add 1/2 to 1 tsp. dried dillweed and 1/4 tsp. pepper.

INSTEAD OF	CHOOSE THESE
French fries	• Baked potato **Oven Baked "French Fries"** Cut 2 lbs. well scrubbed potatoes as for french fries. Put 1 tsp oil in a large pan or bowl and add potatoes. Cover and shake to coat potatoes with oil. Place potatoes on a foil-lined baking pan that has been sprayed with a non-stick spray. Place in a 475 degree oven. Bake 15 to 25 minutes or until well browned. Turn once during baking. Sprinkle very lightly with salt, parmesan cheese, or any favorite flavoring. Serves 4.
Salt/ seasoned salt	• Mrs. Dash Seasonings **Parsley Patch Seasonings** All purpose spice mix ¼ cup paprika 1 Tbsp. onion powder 1 Tbsp. garlic powder ½ tsp. thyme 1 Tbsp. pepper ½ tsp. oregano dash of cayenne pepper (optional) **Special Salad Blend** Mix 4 parts each of marjoram, basil, tarragon, parsley, celery seed and chives, with 1 part each of thyme and grated lemon peel. **Savory Vegetable Blend** Mix 1 part each of marjoram, basil parsley, and chives with ¼ part thyme. **Succulent Egg Seasoning Blend** Mix 3 parts of parsley with 1 part each of tarragon, basil, marjoram and chives. **Surprising Italian Blend** Mix 2 parts each of oregano, marjoram, thyme, and basil with 1 part each of rosemary and sage.

Sodium-Controlled Diet

Why Follow a Sodium-controlled Diet?

A sodium-controlled diet may help you manage your high blood pressure (hypertension). This diet will also help prevent water retention. Even if you are taking medication, it's still important to follow a sodium-controlled diet to help the medication work more effectively.

Important Points To Keep In Mind

- Shake the sodium from your diet. Stop adding salt to your food while it's cooking or at the table.
- Many non-prescription medications contain sodium. Make sure you read the label or ask your doctor or pharmacist.
- When dining out, ask that your order be prepared without salt. Most airlines offer low-sodium meals with 24-hour notice.
- Other actions you can take to help control your blood pressure include maintaining a healthy body weight, limiting alcohol, and exercising regularly.
- Scan food labels for sodium claims. If a product states it's sodium-free, it has less than 5 mg per serving.
- Beware of "light" or "reduced" sodium. This just means less than the original product. It may still contain high amounts of sodium.

Sample Menu for a Sodium-controlled Diet

BREAKFAST

- Orange juice (1 cup)
- Shredded wheat cereal (1 cup)
- Banana (1)
- Whole wheat toast (2 slices) with butter/oil spread (2 tsp.) and jam (1 Tbsp.)
- Non-fat milk (1 cup)
- Coffee or tea

LUNCH

- Low-sodium vegetable soup (1 cup)
- Unsalted crackers (4)
- Hamburger (3 oz.) on a bun with sliced tomato (1) and lettuce (2 oz.)
- Mustard and mayonnaise (1 tsp. each)
- Fresh fruit salad (1 cup)
- Iced tea with lemon

SNACK

- Graham crackers (2)
- Fresh apple (1)
- Non-fat milk (1 cup)

DINNER

- Tossed salad (3 oz.) with salt-free vinegar and oil dressing (1 Tbsp.)
- Broiled skinless chicken breast (3 oz.)
- Herbed brown rice (1 cup)
- Steamed broccoli (1 cup)
- Whole grain roll (1) with butter/oil spread (2 tsp.)
- Italian fruit ice (1 cup)
- Decaffeinated coffee or tea

Source: American Dietetic Association

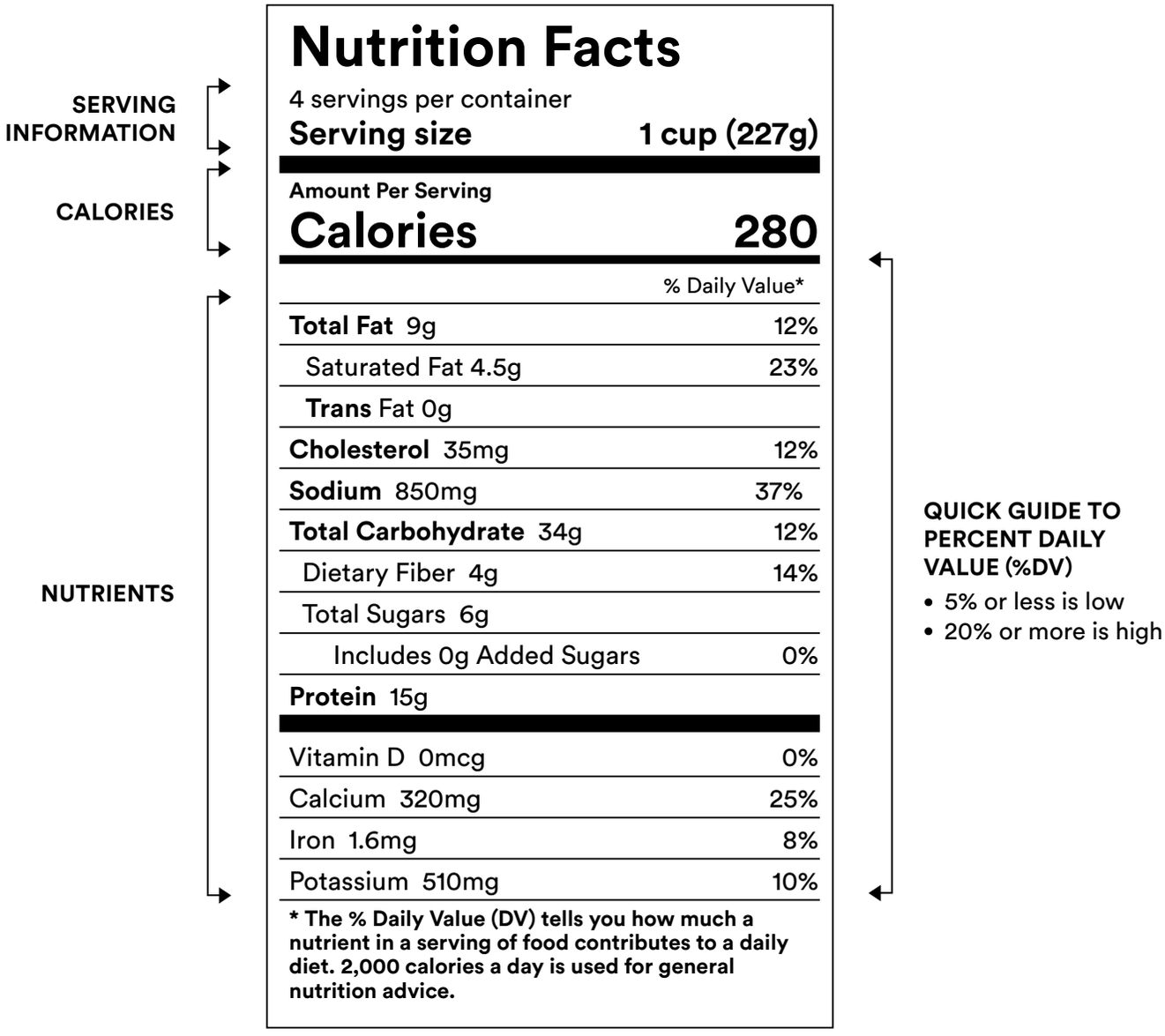
Sodium-Controlled Diet

FOOD CATEGORIES	FOODS RECOMMENDED	FOODS TO OMIT	TIPS
BREADS, CEREALS, RICE AND PASTA (6-11 SERVINGS EACH DAY)			
Serving size = - 1 slice bread - 1 cup ready-to-eat cereal - ½ cup cooked cereal, rice or pasta - ½ bun, bagel or English muffin	- Breads and rolls without salted tops, muffins - Most ready-to-eat and cooked cereals - Unsalted crackers and breadsticks - Low-sodium or homemade breadcrumbs or stuffing - All rice and pastas	- Breads, rolls and crackers with salted tops - Quick breads, self-rising flour, and biscuit mixes - Regular breadcrumbs - Instant hot cereals - Commercially prepared rice, pasta or stuffing mixes	Cook cereals, rice and pasta without adding any salt. Salt can be omitted or decreased in most recipes for baked goods.
VEGETABLES (3-5 SERVINGS EACH DAY)			
Serving size = - 1 cup raw leafy - ½ cup cooked - ¾ cup juice	- Most fresh, frozen and low-sodium canned vegetables - Low-sodium and salt-free vegetable juices	- Regular canned vegetables and juices, including sauerkraut and pickled vegetables - Frozen vegetables with sauces - Commercially prepared potato and vegetable mixes	Season vegetables with herbs, spices or lemon juice, instead of ham, bacon or salt pork.
FRUITS (2-4 SERVINGS EACH DAY)			
Serving size = 1 medium, ½ cup canned, ¾ cup juice, ¼ cup dried	- Most fresh, frozen and canned fruits - All fruit juices	- Fruits processed with salt or sodium	
MILK, YOGURT AND CHEESE (2-3 SERVINGS EACH DAY)			
Serving size = - 1 cup milk or yogurt - 1 ½ oz. natural cheese - 2 oz. processed cheese	- All milk, but limit to a total of 2 cups daily - All yogurt - Most low-sodium cheeses, including ricotta, cream cheese and cottage cheese	- Malted and chocolate milk - Regular and processed cheese, cheese spreads and sauces - Limit buttermilk to 1 cup per week	Dairy foods have moderate amounts of sodium. Keep in mind that milk and yogurt are lower in sodium than most cheeses.

FOOD CATEGORIES	FOODS RECOMMENDED	FOODS TO OMIT	TIPS
MEATS, POULTRY, FISH, DRIED BEANS AND PEAS, EGGS AND NUTS (2-3 SERVINGS OR TOTAL OF 6 OZ. DAILY)			
Serving size = - 2-3 oz. cooked - 1 egg - ½ cup cooked beans - 2 Tbsp peanut butter or ⅓ cup nuts as 1 oz. of meat	- Any fresh or frozen beef, lamb, pork, poultry, fish and some shellfish - Egg and egg substitutes - Low-sodium peanut butter - Dried peas and beans	- Any smoked, cured, salted or canned meat, fish or poultry, including bacon, chipped beef, cold cuts, ham, frankfurters, sausage, sardines and anchovies - Frozen breaded meats - Salted nuts	Use convenience foods and processed meats sparingly or buy low-sodium, reduced-sodium or salt-free varieties. Choose frozen dinners with less than 500 mg sodium per serving.
FATS, SNACKS, SWEETS, CONDIMENTS AND BEVERAGES			
	- Low-sodium or unsalted versions of butter, margarine, salad dressings, soups, soy sauce, condiments and snack foods - Pepper, herbs and spices, vinegar, lemon or lime juice - Low-sodium carbonated beverages	- Salad dressings, soups, gravies and sauces made from instant mixes or other high-sodium ingredients - Salted snack foods, olives - Meat tenderizers, seasoning salt and most flavored vinegars - Commercially softened water - Soy sauce	Read food labels carefully searching for high-sodium ingredients, such as salt, sodium chloride, monosodium glutamate, brine or broth.

Understanding Food Labels

Reading the Nutrition Facts tells more about the food and what you are getting. The information you see on the food label – the nutrition and ingredient details – is required by the government. Some food labels may display a "short label format," that is, when the food has only a few of the nutrients required on the standard label. What's on the label depends on what's in the food. Small-and medium-sized packages with very little label space can also use a short label. If the information is not displayed, there must be an address and/or phone number for the consumer to contact for a copy of the information. The table below shows what the new label looks like and explains some of its new features.



SOURCE: Food and Drug Administration, 2020

Eating Out

"Don't Cook Tonight... Call Your Favorite Restaurant"

Hints for selecting low fat, low salt foods when eating out

Fast Food

If you don't always have time to sit down for a leisurely meal, you may wonder about eating in fast-food restaurants. The good news is fast food is changing. Look for salad bars where you can make your own meal. Beware of salad bars with pre-mixed "specialty" salads (such as macaroni salad, pasta salad, potato salad, carrot raisin salad, etc.), as they usually contain high amounts of fat, sodium, and occasionally, sugar. Instead, add fresh vegetables to your salad and eat with whole grain bread. Try baked potatoes with vegetable or yogurt toppings.

SPECIAL ORDERS

- Another healthy fast-food technique is a "special order." Ask to leave off fatty and calorie-heavy ingredients. For example, a Burger King Whopper without mayonnaise cuts out 150 calories and 16 grams of fat.

HAMBURGER SPOTS

- Choose simply prepared items, such as fresh fruit and smaller portions of meat. When available, choose the grilled chicken breast items (avoid fried chicken patties), the regular (2 oz.) hamburger or the "lean burger" on a bun (whole wheat preferred) with lettuce, tomato and onion. Beware of fried foods and double-decker burgers.

SALADS

- Salads are a great choice at any style restaurant. Choose grilled meats and ask for the dressing on the side. Dip your fork in the dressing, then pierce food to control fat, sodium and calories.

FRIED CHICKEN SPOTS

- Peel the skin and breading off to reduce the calories by half and the fat by two thirds.

PIZZA SPOTS

- Choose smaller portions (i.e., one slice instead of two) and select a salad with "lite" dressing on the side.

MEXICAN SPOTS

- Choose soft shell tacos or fajitas instead of hard shell to reduce fat and calories. Choose tostada salads but avoid eating the shell.

PLEASE NOTE:

Specific information on the nutritional breakdown for each fast-food restaurant may be obtained from various sources such as the fast-food restaurant you visit or your local dietitian.

Italian Food

To many diners, Italian food says pasta. And pastas are a good choice for those on low-fat, calorie controlled diets, as long as they are not filled with cheese or fatty meat or tossed with butter or cream sauces. Linguine with white or red clam sauce is a fine pasta selection. Acceptable sauces include marsala, made with wine, or marinara, made with tomatoes, onion and garlic (no meat). If you're concerned about salt, try pasta primavera, with a small amount of oil and fresh vegetables. Consider ordering the appetizer portion of pasta as your entrée, often the portions are large enough to be filling. Among other selections in Italian restaurants, simply prepared chicken and fish dishes are your best bet. To control fats, calories and sodium, select items that are fixed to order. Avoid dishes like veal scallopine or parmigiana, since they are usually prepared by adding fats. Fresh fruit is an excellent dessert choice.

Japanese Food

Although many dishes are high in sodium, Japanese cuisine is, overall, a boon to those on low-fat diets. Pickled vegetables are low in cholesterol, saturated fat and calories and a lovely introduction to traditional Japanese entree fare like sashimi (raw fish), which is an ideal choice. Beware of sushi (as the rice has very little fiber and has sugar and rice wine added, causing a rapid rise in blood sugar), deep fried dishes such as tempura, and high sodium soups and sauces (or sauces with sugar added). Ask your waiter to serve sauces on the side and keep them to a minimum. Look for the word "yakimono," which means broiled. Dishes that feature

tofu, a soybean curd protein without cholesterol that is high in calcium and extremely low in fat and calories, are especially recommended. Steamed rice makes a good accompaniment.

Chinese Food

When eating Chinese food, skip high-sodium soups and the crisp noodles, which are high in fat and calories. If the noodles are on the table, ask the waiter to remove them. Choose dishes that are boiled, steamed or lightly stir-fried in vegetable oil, rather than sauteed. Although many Chinese dishes are high in sodium, you can ask that sauces, such as soy, be served on the side and that MSG and salt be eliminated in the preparation. If you have high cholesterol, avoid dishes like Egg Foo Young and any menu listing that is made with lobster sauce, since it contains egg yolks. Hunan and Szechuan-style food is high in calories when the meat is first fried in hot oil. Be cautious and avoid all dishes that are deep fried. Enjoy the steamed rice but remember to control the portions.

Mexican Food

Many feel that Mexican food is off limits, but that's not necessarily so. Whole grains are staples of Mexican dishes, and tortillas, made with corn and baked rather than fried, can be a welcome addition to your diet. However, avoid the flour tortillas, made with lard and fried. A fine beginning to your meal might include salsa, a favorite appetizer on Mexican menus. Limit your portion of tortilla chips and ask for sliced vegetables instead. Tomato, onion and avocado salads with fresh lemon squeezed over the top are refreshing. A real treat is ceviche, fish marinated for hours in lime juice then drained and mixed with spices. Together these introductions might make a complete meal for you. If you're still hungry, try shrimp or chicken tostadas on a cornmeal tortilla (not fried). Forget the refried beans (as they are cooked in lard), although some restaurants have boiled beans (a good source of fiber) with onions and spices. In Mexican restaurants, be sure to ask that garnishes, such as cheese and sour cream, be served on the side.

Steakhouse Food

Those on calorie controlled, reduced fat and cholesterol diets may feel it necessary to avoid steakhouses altogether. In fact, steakhouses, like seafood restaurants, may be a good choice, since food is most often prepared to order. Be sure to order your beef broiled without additional fat or salt. Choose lean varieties, like London broil, filet mignon, round and flank steaks, and ask that all visible fat be trimmed. If you're having a baked potato, eat it plain or with controlled amount of butter, salsa, lite sour cream or low-fat yogurt. Enjoy a green salad (with dressing on the side) and fresh steamed vegetables as accompaniments. The plainer your choices, the better.

Middle Eastern Food

Middle Eastern dishes rely greatly on meat, but just as heavily on vegetables, grains and spices. Appetizers may include midya dolma, mussels stuffed with rice, pine nuts and currants, yalanji yaprak, grape leaves filled with a similar mixture, and imam bayildi, baked eggplant stuffed with a variety of vegetables. All are acceptable and a selection of these appetizers might make a tasty and exotic meal. If you wish to order an entree, shish kabob, when not basted with butter, is a good choice and manter kabob, small portions of pot-roasted lamb smothered in mushrooms, green peppers and onions, may be acceptable as long as it's not too oily. Ask that visible fat be trimmed from the meat before cooking. Vegetarians might try couscous, steamed bulgur wheat, topped with vegetables. Couscous may also be topped with chicken. Accompaniments to main courses in Middle Eastern restaurants often include rice or bulgur (cracked wheat) and pickled vegetables, both of which are acceptable. Fresh fruit, especially melons and grapes, make an authentic close to your meal.

French Food

A good rule for dining out in French restaurants is "keep it simple." Steamed mussels or a salad (with dressing on the side) are fine starters, but avoid French onion soup, which is high in calories and salt. Be wary of sauces, the heart of classic French cuisine. Hollandaise sauce, made with egg yolks and butter; bechamel, with milk, butter and flour; and bernaise sauce, an expanded hollandaise, are poor choices. The alternatives are French wine sauces, such as bordelaise; tasty and usually not as high in fat or cholesterol. "Nouvelles" sauces, lighter because flour is eliminated in preparation, still may contain cream, egg yolks, butter and plenty of calories. All sauces tend to be high in sodium. To be safe, ask if your entree is in sauce and how that sauce is prepared. Perhaps you can order it on the side. Avoid dishes labeled "au gratin," as these often come with toppings of cheese and butter.

Greek Food

If you're counting calories, you may worry that Greek food is too oily. Seek dishes prepared with limited amounts of olive oil, and you'll find many acceptable choices. Tzatziki, an appetizer made with yogurt and cucumbers, is safe to order, especially if the yogurt is the low-fat type. Pita bread is very low in fat. Greek salads are filling and delicious. The feta cheese is slightly lower in fat than hard cheeses, but high in sodium. (Remember, that anchovies and olives are also high in salt. If you are on a low-sodium regimen, have the cheese, anchovies and olives removed before serving.) Order dressing on the side. For a main course, stick with dishes like plaki, fish that's been cooked with tomatoes, onions and garlic; or shish kabob, broiled on a spit and made with baby lamb, tomatoes, onions and peppers. Have your entree with rice. As for pitfalls, lamb, often found on Greek menus, has more saturated fat than beef; phyllo dough, used in some entrees and desserts, is very high in fat; caviar, used in some appetizers, is high in cholesterol; and babaganoosh, an eggplant appetizer, is frequently prepared with fat, keeping it high in calories.

Health Food/Vegetarian

Nutrition-conscious diners have prompted a proliferation of health food and vegetarian restaurants. Most offer an array of salads, lots of yogurt based dishes, food prepared in soybean oil (a polyunsaturate) and many selections made with beans and grains, nuts and seeds. Unfortunately for calorie watchers, some of these dishes may be high in fat especially if made with large quantities of oils, high-fat dairy products or even nuts and seeds. If on a low cholesterol, low-fat regimen, you should note whether or not eggs or whole-milk cheeses have been used in the preparation and if yogurt is made from whole or skim milk.

Indian Food

The tastiness of Indian food, which is generally low in saturated fat, cholesterol or calories, is a tribute to the creative use of spices. Many of the dishes offered use a yogurt-based curry sauce, a good choice for those on special diets–especially if the yogurt is the low-fat type. You'll enjoy the salads, often a refreshing combination of yogurt with chopped or shredded vegetables (raita). Tandoori chicken and fish dishes, which are marinated in Indian spices and roasted in a clay pot, make a delicious and authentic meal. Often, however, butter is used to baste the tandoori preparations. Ask if margarine can be used instead. Seekh kabob,

marinated ground lamb that is cooked over coals, is another choice as long as the lamb is lean. Vegetables are an important part of Indian meals. Lentils or dal, are high in protein and fiber and low in fat. Always check to see if ghee, which is clarified butter, is used in the preparation of vegetables. Indian dishes are often served with plain rice, a cooling accompaniment. Try the delicious breads, like dry pulkas (unleavened wheat bread) or naan (without butter).

Remember: When in doubt, ask your server

Adapted from: "Dining Out - A Guide To Restaurant Dining," American Heart Association, 1984.

Recommended Books/Cookbooks

There are many good books on cooking and nutrition available at the bookstore or in your local library. These are only a few and we encourage to you to experiment. Look for those that list calories, fat, and sodium with recipes.

The New American Heart Association Cookbook, 9th Edition

American Heart Association
May 2019

The Mediterranean DASH Diet Cookbook

Abbie Gellman, MD, RD, CDN
November, 2019

Cooking Light

Magazine published 6 times per year
Cookbook published annually

The Complete Mediterranean Diet Cookbook

The Editors at America's Test Kitchen
December 2016

Simply Good Cookbook: A Cookbook for Stroke Survivors and Their Families

Available for free download from the American Stroke Association
www.stroke.org/en/life-after-stroke/recovery/simply-good-cookbook

Other free publications are available through your local chapter of the American Heart Association.

Job Retraining/ Volunteering

After your stroke, you may or may not be able to return to the job you had before. All states have vocational rehabilitation programs to retrain people with disabilities who can still work and to help them find jobs.

If you think retraining would help you, contact your California Department of Rehabilitation, Laguna Hills Branch at 949-598-7942. A counselor will help determine if you are qualified for the program. Eligibility depends on two criteria:

1. The existence of a disability that prevents you from working
2. Financial need

Helpful Tips from People Who Have Had Strokes, and Are Now Employed or Volunteering

- Be flexible, think of new ways to make changes in the way you work, i.e., work shorter hours, fewer days, and so on.
- Pace yourself, take time to rest. Stick to regular consistent hours, without extending them to overtime.
- Take your medications on time, especially if you are busy. Keep a back-up supply of medications at work. Make taking care of yourself a priority.
- Communicate what you need at work. If there are any helpful adaptive devices that could make your job easier and help you work more efficiently, discuss them with your employer.
- Some people will treat you differently when you return to work. Make every effort to be a part of the activities at work. Expressing your interest in people you work with promotes a sense of belonging. Use humor or a light attitude when dealing with a person who seems newly uncomfortable in your presence.
- Take short breaks. Take time to rest and renew yourself. Learn some relaxation techniques. Talk to yourself in a positive, encouraging way.
- Consider professional psychological or vocational counseling. It may put into perspective some of your concerns about work. Appropriate support groups may also offer tools to cope with work-related problems.

See page 67 for more information.

Driving

Driving is a major concern after a stroke. It's not unusual to want to drive after a stroke; being able to get around after experiencing one is important. But while safety is always an issue when a person gets behind the wheel, it's even more important after a stroke. The reason is that a stroke may change how you do things. Before you drive again, think carefully about how these changes may affect your own and other people's safety.

How does a Stroke Affect Driving?

Stroke affects different people in different ways. If you have any of these effects, they could seriously impact your ability to drive safely.

- Changes in mobility. Paralysis (weakness) in your arm or leg affects how you steer, brake and accelerate. Your reaction time also may be slowed.
- Changes in vision. Loss of vision in one or both eyes affects your ability to see in the rear view mirrors and outside windows. Visual perceptual problems may change how well you judge distance, or speed, and maintain your lane position.
- Changes in thinking skills. Impulsive behavior, impaired judgment and difficulty problem solving also may influence your driving behavior. May cause difficulty in focusing, attention, and the ability to handle multiple distractions on the road.
- Changes in communication. Being unable to follow directions, difficulty following road or traffic signs, read a map, ask for help or explain events are secondary aspects of driving, but they're also safety concerns.

For additional driving information, visit www.aded.net

How do I Know if I can Drive?

- Talk to your doctor. He or she can tell you about your stroke and how it might influence your driving. You'll also get a professional opinion based on experience.
- Contact the State Department of Motor Vehicles in your area. Ask for the Office of Driver Safety. Ask what requirements apply to people who've had a stroke.

- Enroll in a Driver's Rehabilitation Program. For a fee, you may receive a driving assessment, classroom instruction and suggestions for modifying your vehicle (if necessary). This program is available at Hoag Rehabilitation Services in Newport Beach.

See page 68 under "Community Resources" for driving re-training programs.

A driver rehabilitation specialist is specifically trained in both driver education and medical aspects related to stroke to address your special needs.

To ensure safety for the stroke survivor who drives, driver rehabilitation specialists have developed some helpful hints:

- Drive in familiar areas.
- Drive on less congested roadways.
- Use clearly marked lanes.
- Use uncomplicated intersections.
- Combine trips to minimize driving.
- Clean windshield to maximize visibility.
- Avoid clutter on the dashboard.
- Eliminate distractions (phone, ratio, etc.).

Stroke survivors are also advised to avoid certain conditions that make driving more dangerous, such as night driving, rush-hour traffic, bad weather and unprotected left turns.

What if I Can't Drive?

If you can't drive, you can still feel good about yourself. You've made the responsible choice and have considered both your safety and the safety of others. Even though it may feel like it at first, life isn't over. There are other forms of transportation, including:

- Public transportation. Many cities offer reduced fare passages and have wheelchair lifts on buses.
- Specialized transportation vans or taxis. Some places have transportation systems specifically designed for people who need help.
- Friends and family. Ask for a ride from family members and friends when you need to go somewhere. And when you're offered a ride, accept it.
- Check on community resources, such as senior citizen's groups and local volunteer agencies.
- Use ridesharing services.

Sexuality

Sexual intimacy for the stroke survivor maybe a difficult and sensitive topic to discuss. You may have many questions and concerns about sexuality and may even be afraid to discuss them. Some questions include: Can I have sex again? Will my medications interfere with my ability to have sex? Will sex cause another stroke?

It's important to know that many men and women who have had strokes continue to enjoy an active and healthy intimate life with their partners.

Your feelings about your body may have changed as a result of your stroke. Coping with these changes in your body can affect how you feel about your sexuality. First, realize that accepting these changes takes time and effort. You may experience anger, grief, depression and denial. But by dealing with these feelings, you can begin to accept the way your body has changed. It is important to remember that sexuality is not just the act of sexual intercourse, it involves much more than that.

Sometimes, simply being able to take care of yourself in personal matters, such as bowel and bladder functions enhances self-esteem. This, in turn, increases feelings of sexual attractiveness. Getting dressed every day and trying to look your best may boost your feelings and the feelings of those around you.

It is also important to discuss with your mate how you both are feeling about physical changes. Remember that in all partnerships it takes effort to maintain what is good and correct what is not. This is true whether or not it involves people with disabilities.

Professional help is always available, including your doctor, nurse psychologist and social worker. They can also refer you to someone who is trained to do so.

Sexual health is a combination of sexual anatomy or sexual functioning that sometimes can be helped by a sexual medicine evaluation. There are specialized sexual medicine health care providers who specialize in the diagnosis and treatment of sexual concerns. These professionals are trained to help men and women who have had a stroke.

Because sex is often a sensitive topic, your doctor or your mate may not discuss it with you unless you ask.

Resuming intimate relations with your partner can be a scary situation, especially when you haven't had the interest or desire to be together for some time. Take your time and do not feel pressured to resume sexual intercourse right away. Each person's experience is different and everyone will resume intimacy at their own pace.

If it is a concern, please speak with your health care provider and request a referral to an intimacy specialist. A sexual health concern should not be ignored.

If you were sexually active before your stroke, you probably can be sexually active again. But this requires time, patience and the loving support of your mate. If you were not particularly interested in sex before your stroke, this will not necessarily change. In any case, don't measure success or disappointments by past performance.

Begin slowly. Start with being close to your mate by touching and caressing each other. Begin to explore what feels good to you now that sensation on one side of your body may be different. Do not feel that you need to have sexual intercourse to feel good about being with your mate. Add intercourse only if and when you both feel ready. The goal is to enjoy each other.

The focus should be on pleasure rather than performance. Focus on physical intimacy and spend quality time together; share emotions and thoughts. Also, it's important to be sensual in an non-sexual way: holding hands, cuddling and even massage can be a pleasurable experience.

Tips for intimacy after a stroke:

- Remember if you had a stroke, your body and appearance may have changed. You and your mate may need time to get used to this and other changes related to the stroke.
- Time intercourse when you are the most rested and relaxed and have enough time to enjoy each other.
- If the stroke survivor lacks sensation on half of the body, stay away from that side during intimacy.
- If the stroke survivor has limited vision on one side, try to stay where you can be seen during intimacy.
- If one side of the stroke survivor's body is weak, he may want to lie on his affected side, or his mate might want to take the position on top.
- Pillows can be used to prop up the affected side.
- To control a spastic limb during lovemaking, lie on the affected limb and bend it slightly.
- If thrusting movements are difficult for the stroke survivor, the mate may want to perform that part of the lovemaking.
- If intercourse is difficult, remember that other forms of sexuality and intimacy can provide a great deal of pleasure, including touching and caressing, massages, oral sex, self stimulation, and lovemaking with vibrators.

Other suggestions:

- Discuss your medications with your health care provider; sometimes medication schedules can be adjusted. Never stop or change medication without first discussing it with your health care provider.
- Planned sexual activity right before a meal is often best. Decreased foods and alcohol intake before sexual activity reduces excess cardiovascular strain.
- Set the stage: remember that the setting is also important. Dim the lights, play soft romantic music, maybe light scented candles to help enhance the sensual mood.
- If you have a catheter, check it before intimacy. If incontinence is an issue or loss of urine, keep towels handy for easy clean up.
- Communicate: Even if your speech is impaired, touch can be the best form of communication. Desire and connectedness is an important component of your sexual health.

Remember that you are not alone. Sexuality concerns are very common, especially in men and women with chronic medical illnesses. There is professional help available to address your concerns in a private and confidential manner.

Smoking Cessation

It is a well-known fact that smoking is a risk factor for many health problems. Recent studies have confirmed that cigarette smoking is a risk factor for stroke. The nicotine and carbon monoxide in cigarette smoke damage the cardiovascular system and pave the way for stroke to occur. Since e-cigarettes also contain nicotine – some contain as much as a pack of cigarettes – it is a concern that vaping or using e-cigarettes can also be a risk factor for stroke.

Below is a stop smoking directory with resources to help you quit smoking or vaping. Many of the resources are free and include telephone support, online resources, or local meetings for support as you quit smoking.

Stop Smoking Directory

Provided by: American Lung Association® of Orange County

American Cancer Society

1-800-227-2345
www.cancer.org/cancer/risk-prevention/tobacco
For information about quitting tobacco and online resources.

American Lung Association of Orange County

1-800-LUNGUSA (800-586-4872)
www.lung.org/quit-smoking
For tools, tips, and support to help you quit smoking.

FREEDOM FROM SMOKING ONLINE
www.freedomfromsmoking.org
Interactive course designed to educate and modify the behavior patterns of a smoker

Nicotine Anonymous

1-877-879-6422
www.nicotine-anonymous.org
Offering help to those who desire to stop using nicotine. Support available in multiple languages, and you can search for local meetings.

Kick It California

www.kickitca.org
Kick it California offers a range of services from one-on-one quit coaching, text programs, and self-help materials.
Text program is available in English, Spanish, Chinese, Korean, and Vietnamese.
There are programs to quit smoking, vaping, and smokeless tobacco use.

Asian Smokers' Quitline

www.asiansmokersquitline.org
Offers free telephone counseling, self-help materials, free nicotine patches and online help in four Asian languages (Cantonese, Mandarin, Korean and Vietnamese) to help you quit smoking.

County of Orange Health Care Agency – Tobacco Use Prevention Program (TUPP)

866-NEW LUNG (866-639-5864)
Languages available are English, Spanish, Vietnamese, Korean, and Farsi.
www.ochealthinfo.com/tupp
Services: Phone counseling and self-help materials, information on local policies to decrease access of tobacco to youth. Free quit smoking or vaping classes, and free supply of nicotine patches for adults 18 and older.

Hoag Hospital

One Hoag Drive
Newport Beach, CA 92663
949-764-5511
www.hoag.org/specialties-services/other-programs-services/smoking-cessation/
We hope to continue our in-person smoking cessation classes through 2024.

Stress Management

What is Stress?

Stress is one's physical and emotional response to change.

- **Positive Stress:** May improve one's concentration, performance and motivational drive to achieve goals "under pressure"
- **Negative Stress:** Environmental factors that cause a non-specific chain of reactions that keep you "geared up" in a constant ongoing debilitating cycle.
- **Causes of Stress:**
  - People
  - Environment
  - Feelings
  - Relationships
  - Thought process
  - Physical illness

Symptoms of Stress

- **Physical:** Headaches; muscle tension; difficulty sleeping; sweating; back pain; irregular heart rate; fatigue; frequent colds or flu; sexual dysfunction; skin problems; upset stomach
- **Psychological:** Anxiety; impatience; depression; irritability; anger; feelings of helplessness
- **Behavioral:** Eating too much or too little; difficult communication; lack of concentration; excess smoking; alcohol and drug use.

Guidelines for Preventing Stress

1. **Slow down.**
   Plan ahead and allow enough time to get the most important things done without having to rush.
2. **Sleep more.**
   Try to get at least six to eight hours of sleep per night. To ward off insomnia, be more active and mindful.
3. **Worry less.**
   The world will keep going if you don't get everything done. Give yourself a break.
4. **Laugh.**
   Laugh often and out loud, even when you're alone.
5. **Stay connected.**
   Friendship and family connections are great medicine. Prioritize calling friends and family to catch up.

6. **Get organized.**
   Create to-do lists to help you prioritize important tasks, and handle big projects one step at a time.
7. **Give back.**
   Helping others helps you feel good. Volunteer your time at a local charity or help out a friend.
8. **Stay active.**
   Exercise relieves both mental and physical tension. Find something you enjoy and do it every day.
9. **Give up bad habits.**
   Excessive alcohol, tobacco or caffeine can increase blood pressure. Cut back or quit to reduce anxiety.
10. **Change what you can.**
    Put your energy into learning a new skill, working toward a goal, or helping others.

Stop Stress in its Tracks with these Tips

1. Count to 10 before speaking or reacting.
2. Take slow, deep breaths until you feel your body relax.
3. Taking a walk, even just to the restroom and back, can help break the tension and give you a chance to think things through.
4. Try a quick meditation or prayer to gain perspective.
5. If it's not urgent, sleep on it and respond the next day – especially with stressful emails and social media trolls.
6. Walk away from the situation for a while, and wait to handle it until things have calmed down.
7. Break big problems down into smaller parts.
   Take one step at a time instead of trying to tackle everything at once.
8. Relax with music or an inspirational podcast to help decrease road rage.
9. Take a break to pet your dog/cat, hug a loved one or help someone out.
10. Do something active – exercise is one of the best stress relievers.

The Caregiver's Role

When a stroke survivor can't do everything independently, "caring for" someone has another meaning. It means providing care for the person who's had a stroke. Caring in this sense goes beyond personal feelings and includes what we do for the person who needs help.

People who provide help for stroke survivors are called caregivers. Everyone involved in helping a stroke survivor is a caregiver – the spouse, family members and friends. There's no one "job description" that explains what all caregivers do. The responsibilities of each caregiver vary according to the unique needs of the stroke survivor. All people who will provide care must determine for themselves the type and amount of care they can offer. This may require a number of adjustments as roles change and new skills may need to be learned. Common responsibilities of caregiving include:

- Physical help with life's daily activities
- Managing financial, legal and business affairs
- Monitoring behavior to assure safety
- Coordinating medical and rehabilitative care
- Providing emotional support for your stroke survivor and family members

The role of caregiver may vary from having full responsibility for all these areas to only having minimal responsibility. "Caregiving" can develop slowly or happen suddenly. There's no real training for the job. It's something you may never have expected.

Goals and Limits

Caregiving isn't well defined. At an extreme, a caregiver sometimes seems to be doing everything for someone, with no limits. Though caregiving can be difficult, setting goals helps. Remember, a caregiver's basic goal is to assure the care receiver's physical comfort and safety. When you assist in rehabilitation or recovery, you help that person function at the best possible level. And with your help and personal care, the stroke survivor preserves dignity and self-esteem. Whether you've just started or you're an experienced caregiver, you may need help organizing your time and resources and getting answers to many questions.

It's important to know about the stroke and the deficits affecting your family member. Doctors and other health professionals can tell you the medical and behavioral signs. Don't be afraid to ask healthcare professionals about what your care receiver's condition, feelings and actions mean for you. The amount and type of care or supervision you provide may change as the condition changes.

It will be helpful for you to learn as much as you can and how best to help, as well as participate in education offered for you and your loved one. Participate in some rehabilitation sessions. This is a good way to learn how rehabilitation works and how to help. Find out what the person can do with help, and what the person can't do.

Taking Care of Yourself

Caregiving can be a satisfying experience. It involves helping someone you care for continue living independently in the community as much as possible. You, the caregiver, are incredibly important. As the caregiver, you've also accepted a special responsibility to take care of yourself, physically, emotionally, mentally, spiritually, interpersonally, and financially. Finding an opportunity to break the routine, to leave your caregiving responsibilities in other competent hands is essential. Taking a break is considered by many to be the most important thing a caregiver can do to sustain the ability and desire to care for an individual. It's called respite care, or taking time out. You will be able to continue providing care when you are rested, refreshed, and invigorated, after engaging in other activities and interacting with other people. You need time for yourself, to spend with friends or alone, relaxing, on a vacation, or engaging in a favorite hobby or sport. Respite care almost always works with proper planning.

Assembling the Pieces

Who has time for all this? It's a reasonable question. It may be difficult to change your lifestyle immediately to achieve real health in every area at once. But get started. Select at least one or two areas to work on right away. In other words, set a realistic goal for yourself to improve your life in these areas of health, and regularly check your progress toward that goal. Remember, these are important health activities to regaining a sense of control over your time and your life.

Preparation

Especially if you've always been available, your care receiver will need to be prepared when you do leave for a break. Reassure all involved that you will return at a particular time. The helpers will need to know the schedule and routine in the home, exactly what they're expected to do, and how to reach you if a problem arises.

Defining your Need

As in other caregiving responsibilities, you must be organized. You must know what type of help or relief you need or want most. Do you need occasional respite or a regularly scheduled helping arrangement you can rely on, or both? Ask relatives, friends, clergy, or social workers for suggestions of other people who might help. Try to involve these others with giving care early. Keep them involved! You need their assistance for an occasional break. Neighbors and friends may be glad to help when asked, despite hesitating to offer. Often word of mouth is a good way to locate dependable, suitable assistance. Local colleges, churches and senior centers can also be sources of referrals or help. Family and friends can and should play major roles in caring for a disabled or impaired person. This is true even if most of the care has obviously been taken on by one person, you!

Physical Health

- Rest: Physical health is a key caregiver concern. Adequate rest every night is imperative. Beyond daily rest, most likely you will also need an occasional "major" rest. That means planning a period of respite such as a long weekend or a week of vacation.
- Exercise: Regular exercise is extremely important and will strengthen you for the rigors of helping someone who's unable to walk alone to move from place to place. It will also help you rest better.
- Diet: A well balanced diet is, of course, also linked to overall physical health. Though you may not always feel like eating, do so anyway. A proper diet can help establish the cycle of good health.

Emotional and Mental Health

Almost every caregiver needs to talk about emotions stirred up by the job of caring for a frail or handicapped person. You may feel anger, guilt, impatience, helplessness, love, and dislike all at the same time. Admit that such feelings exist. Accept them! Don't waste effort trying to talk yourself out of having a certain feeling. And realize that your situation is not unique. Many other people are also caregivers and have these same feelings about their situations. In some areas there may also be a volunteer phone reassurance program or caregiver support groups to bring together people like you. Even finding one other caregiver to talk with occasionally may help. Social workers, clergy, or counselors may also be able to help you talk about your situation and feelings. Keeping up with current events and local news will broaden your sights beyond your own home situation. Reading, music, and other mental "exercises" will also provide welcome diversion and pleasure. Laughter is an important habit to cultivate. It can ease tension and frustration and can help you enjoy small moments of success.

Spiritual Support

Spiritual health goes by many names. But basically, the term refers to the peace and strength we carry within us.

Interpersonal Well-Being

Affection is necessary for human survival. Just as the person you care for needs it, so do you. Friends, family members, counselors, or clergy can support you. Remember, we each need to receive our share of affection in order to give it to others.

Financial Health

Caring for another person can be costly. You should seriously consider the financial consequences for you, your plans, your family, and your future.

Benefits for Both

Be specific in your requests for help. Consider small things that individuals might easily provide, like spending a few hours a week playing cards, watching TV with a family member, or just staying in the house while you're gone.

Tips for Family Caregivers

- Caregiving is a job and respite is your earned right. Reward yourself with respite breaks often.
- Watch for signs of depression, and don't delay in getting professional help when you need it.
- When people offer help, accept the offer and suggest specific things that they can do.
- Educate yourself about your loved one's condition and how to communicate effectively with doctors.
- There's a difference between caring and doing. Be open to technologies and ideas that promote your loved one's independence.
- Trust your instincts. Most of the time they'll lead you in the right direction.
- Grieve your losses, and then allow yourself to dream new dreams.
- Seek support from other caregivers. There is great strength in knowing you are not alone.
- Use correct body mechanics and know your limits when lifting or assisting. You won't be as helpful if you are injured.

Working Together

The family is the most important source of long-term support during the recovery of a stroke patient. The multi-disciplinary healthcare team needs your help to accomplish the most effective treatment plan for your loved one. Family members are a significant part of the treatment plan and the healthcare team invites you to share your observations and feelings with us. We are here to answer your questions and to help you and your loved one through the acute hospital phase by developing the best discharge plan possible. Our goal is to assist the patient in regaining as much independence as possible, within his or her limitations.

Giving care to a disabled family member brings stress into the family. It changes the family system. It changes how each family member relates to all other family members.

Family Conference

Sometimes clear-cut family roles can help everyone sort out the expectations of each family member, including the caregiver, knowing what they should do for the disabled family member. These are good times for everyone to talk and make long-term plans for the disabled family member, share information and feelings, and plan emergency or vacation back-up for the primary caregiver.

If you accept the role of caregiver, you should feel free to request significant help from family members inside and outside the household. The success of a caregiving plan increases when family members are able to express their feelings and help shape the caregiving plan.

Organizing Details

There is usually one primary caregiver. That person usually becomes the in-home case manager and switchboard for information. Unless otherwise arranged, that person coordinates the care plans decided on by the family. Family members need to decide how to share responsibility for meeting these needs. There are many ways to divide tasks: by specific need, by interval of time, by ability to provide. Assigning each person the responsibility for meeting one specific care need can be an effective way to divide responsibilities.

Changing Relationships

The caregiver, family member and the care receiver will all encounter new situations in their new roles. Working together as a family usually will be the best way to plan and work for changes that will be most beneficial for all.

Caregiver's Bill of Rights

I have the right...

1. To take care of myself. This is not an act of selfishness. It will give me the capability to take better care of my relative.
2. To seek help from others even though my relatives may object. I recognize the limits of my own endurance and strength.
3. To maintain facets of my own life that do not include the person I care for, just as I would if he or she were healthy. I know that I do everything that I reasonably can for this person, and I have the right to do some things just for myself.
4. To occasionally get angry, be depressed and express other difficult feelings.
5. To reject any attempts by my relative (either conscious or unconscious) to manipulate me through guilt.
6. To receive consideration, affection, forgiveness and acceptance for what I do from my loved one for as long as I offer these qualities in return.
7. To take pride in what I am accomplishing and to applaud the courage it has sometimes taken to meet the needs of my relative.
8. To protect my individuality and my right to make a life for myself both now and when my relative no longer needs my full-time help.
9. To expect and demand that as new strides are made in finding resources to aid physically and mentally impaired persons in our country, similar strides will be made towards aiding and supporting caregivers.

This "Bill of Rights" is adapted from Caregiving: Helping an Aging Loved One by Jo Horne, AARP Books, 1985

A Caregiver's Resource Guide

Most stroke survivors want to continue living in their own homes and communities. But while most of us would want to support that desire and keep our family member at home, illness or disability may make it difficult. A variety of community services has been developed to help stroke survivors and their families remain at home. Many of these services provide vital assistance with the daily activities of independent living, including needs of safety, health, mobility and nutrition. A range of services available is briefly described below. Some of these programs require fees, which are often calculated on a sliding fee scale determined by your ability to pay.

Adult Day Care – specialized program for those who are not physically and/or mentally capable of full-time independent living and need professional protective supervision in a social setting during the day.

Counseling – assisting the client and his or her family to cope with social, mental, emotional, and sometimes medical factors affecting their total well-being. The aim of counseling for the client usually is to reduce stress, make decisions, improve communication skills, and spur personal growth.

Day Treatment – structured services operating less than 24 hours per day, which teach independent living skills and socialization skills, and offer psychosocial rehabilitation and psychotherapy to increase independent and effective functioning.

Home-Delivered Meal (Meals-on-Wheels) – a federally-sponsored meal program for homebound or disabled persons 60 and older (and their spouses regardless of age). Meals on Wheels are hot meals prepared by churches, or other local volunteer groups off-site and delivered directly to client homes.

Home Health Aide Services – in-home personal care assistance with bathing, eating, toileting, mobility, etc. or the training of the client to perform these procedures as appropriate.

Homemaker Assistance – supervised trained personnel assisting with light cleaning, shopping, laundry, some food preparation, and other household duties.

Respite Care – supervision and assistance by individuals who come into the home for a limited time to provide family members a break in responsibility for a frail, handicapped, ill or disabled person.

Transportation Services – assistance with travel to and from community resources and facilities for routine and/or scheduled needs (i.e., medical, social, nutritional).

Palliative Care Consult Service at Hoag Hospital

What is Palliative Care?

The term palliative is derived from the original Greek root word pallios meaning “to cloak.” Palliative care is different from hospice in that patients can receive aggressive alleviation of suffering while continuing to receive disease-focused treatments – whatever the prognosis.

At Hoag, our Palliative Care Program focuses on:

- Complete pain and symptom management
- Supportive counseling
- Emotional and spiritual support
- Goals of care discussions
- Education regarding community palliative care services

Who can Benefit from Palliative Care?

The World Health Organization defines palliative care as a treatment approach that improves the quality of life of patients and their families facing the problems associated with life-limiting illness. This is accomplished through the prevention and relief of suffering by means of early identification and careful assessment and treatment of pain and other needs that can be physical, psychosocial and/or spiritual.

The Palliative Care Consult Service works closely with the attending physician to control pain and symptoms, and allow individuals to focus on regaining control and quality of life.

Palliative care may be right for you if you suffer from:

- Pain
- Nausea
- Breathlessness
- Anxiety
- Other symptoms due to a serious illness

Serious illnesses may include cancer, advanced heart disease, advanced lung disease, kidney failure, Alzheimer’s disease, and advanced liver disease. Palliative care can be provided at any stage of illness and along with treatments intended for cure of the disease.

For more information on Hoag’s Palliative Care Program, call 949-764-8585.

Where To Turn For Help

Following is a list of several local and national community resources that can offer assistance with a variety of issues.

Information and Emotional Support

PICKUP FAMILY NEUROSCIENCES INSTITUTE AT HOAG
One Hoag Drive
Newport Beach, CA 92663
949-764-6066
www.hoag.org/specialties-services/neurosciences/

HOAG COMMUNITY EDUCATION SERIES
Hoag offers free education classes to the community on a variety of health care topics, including stroke. For a list of classes and to register, please visit:
www.hoag.org/community-education-classes/
Or call 949-764-HOAG (4624)

AMERICAN STROKE ASSOCIATION
800-242-8721
www.strokeassociation.org or www.stroke.org
- About Stroke
- Life After Stroke
- Caregiver Support
- Resources

CAREGIVER ACTION NETWORK
202-454-3970
www.caregiveraction.org

CAREGIVER HELPDESK
855-227-3640

FAMILY CAREGIVER SUPPORT PROGRAM
OC Office on Aging
800-510-2020
714-480-6450
www.officeonaging.ocgov.com/services/fcsp

FAMILY CAREGIVER ALLIANCE
800-445-8106
www.caregiver.org

CAREGIVER RESOURCE CENTER ORANGE COUNTY
800-543-8312
714-446-5030
www.caregiveroc.org

MEALS ON WHEELS ORANGE COUNTY
www.mealsonwheelsoc.org
Languages available: English, Spanish, Chinese, Korean, Vietnamese
Services: Meal Programs, Adult Day Services, Friendly Visitors/Callers

Sleep Disorders

HOAG SLEEP HEALTH PROGRAM
Judy & Richard Voltmer Sleep Center - Newport Beach
510 Superior Avenue, Suite 200A
Newport Beach, CA 92663
949/764-8070
www.hoag.org/sleep

Hoag Sleep Center Irvine
16305 Sand Canyon Ave., Suite 230
Irvine, CA 92618
949-557-0130
www.hoag.org/sleep

Smoking Cessation

See page 58.

Employment

DEPARTMENT OF REHABILITATION
(Employment and independence for Californians with disabilities)
1-800-952-5544
www.dor.ca.gov

Support Groups

HOAG STROKE SUPPORT GROUP
Hoag Hospital Stroke Support Group offers a stroke support group for caregivers and survivors. The group meets on the fourth Thursday of each month, from 2 p.m. to 3:30 p.m. For more information, call 949-764-3623.

HOAG BRAIN ANEURYSM/AVM SUPPORT GROUP
Hoag Hospital offers a support group for those diagnosed or treated for an aneurysm or arteriovenous malformations (AVM) of the brain. The group meets on the second Wednesday of every other month. For more information call 949-764-3628.

Currently the Hoag Stroke Support Group and Brain Aneurysm/AVM Support Group are being held in-person and virtually on Zoom. Register for a link to the meetings at:
www.hoag.org/community-education-classes/

ORANGE COUNTY STROKE REHABILITATION NETWORK
www.ocsrn.com

STROKE FAMILY WARM LINE
888-478-7653
Hours of operation: Monday - Friday, 6 a.m. - 3 p.m.
www.stroke.org/speakwithus

Financial Support

MEDI-CAL
ORANGE COUNTY SOCIAL SERVICES AGENCY
1-800-281-9799
www.ssa.ocgov.com
Apply online or find the Social Services Regional Center that serves your zip code.

HICAP
HEALTH INSURANCE COUNSELING AND ADVOCACY PROGRAM
www.cahealthadvocates.org
714-560-0424
800-434-0222

MEDICARE
800-MEDICARE (800-633-4227)
www.medicare.gov

Information on Aphasia

HOAG VIRTUAL COMMUNICATION RECOVERY GROUP
520 Superior Ave.
1st floor exercise room
Newport Beach, CA 92663
Fridays, 1:15-2:30 p.m.
Cost: $28 per month
For more information call 949-764-1918.

NATIONAL APHASIA ASSOCIATION
400 East 34th St.
New York, NY 10016
800-922-4622
www.aphasia.org

AMERICAN SPEECH–LANGUAGE HEARING ASSOCIATION
800-638-8255
TTY 301-296-5650
www.asha.org

Driving Re-Training Programs

HOAG REHABILITATION SERVICES
DRIVING ASSESSMENT AND TRAINING
Hoag Health Center Newport Beach
520 Superior Ave., Ste. 100
Newport Beach, CA 92663
949-764-5645

PROVIDENCE ST JUDE
DRIVER ASSESSMENT PROGRAM
2767 E. Imperial Hwy.
Brea, CA 92821
714-578-8706, ext. 2327

Additional Resources

HOAG REHABILITATION SERVICES
Hoag Health Center Newport Beach
520 Superior Ave., Ste. 100
Newport Beach, CA 92663
949-764-5645
www.hoag.org/rehab

16300 Sand Canyon Ave., Ste. 100
Irvine, CA 92618
949-557-0630
www.hoag.org/rehab

MARY & DICK ALLEN DIABETES CENTER AT HOAG HOSPITAL
520 Superior Ave, Suite 150
Newport Beach, CA 92663
949-764-8065
www.hoag.org/diabetes

4870 Barranca Pkwy., Ste. 110
Irvine, CA 92604

AMERICAN DIABETES ASSOCIATION
800-DIABETES (800-342-2383)
www.diabetes.org

AARP
888-OUR-AARP (888-687-2277)
Spanish 877-342-2277
www.aarp.org

Glossary

ADL
Activities of daily living, including dressing, bathing, toileting, grooming, eating and homemaking.

Ambulate
To walk.

Angiogram
A procedure done to visualize the blood vessels in the brain.

Aphasia
A language problem that involves difficulty in understanding, talking, reading and writing.

Apraxia
Difficulty performing planned movements or sequences of movement (including muscular control of the tongue), which are not the result of paralysis, incoordination, or loss of sensation or comprehension.

Aspiration
Food or liquid that has gone into the lungs rather than the stomach.

Assistive Device
A device used to assist in ambulation or to improve activities of daily living (i.e. cane, walker).

Ataxia
Inability to coordinate muscle groups for smooth movement.

Atrial Fibrillation
Rapid, irregular contraction of the atria of the heart that produces an irregular and often rapid ventricular rate.

Attention
The ability to concentrate on information.

Carotid Artery
A major artery in the neck that supplies blood to the head and brain.

Cognition
The activities involved in thinking, reasoning and problem solving.

CT Scan
CAT Scan (Computerized Axial Tomography) – A series of X-rays taken and analyzed with a computer to determine the level and type of damage to the whole body and/or specific area.

CVA
Cerebral Vascular Accident. See “Ischemic Stroke.”

Denial
Inability to understand the nature and extent of the patient’s cognitive, behavioral and functional deficits. This difficulty often is due to both cognitive and psychological factors.

Disorientation
Confusion about one’s identity, location, or the current date.

Dysarthria
Unclear, slurred speech resulting from weakness and/or incoordination of the muscles used to produce speech and voice.

Dysphagia
A disorder of swallowing due to neurological injury, structural abnormality or surgical alteration of the muscles of swallowing.

Edema
A condition in which the body tissues contain an excessive amount of fluid. This may be a localized problem, such as in brain or extremity swelling.

Fine Motor Activities
Activities that include hand coordination, such as writing and buttoning.

Flaccid
Total lack of muscle tone or activity in a muscle or muscle group.

Hemianopsia
Defective vision or blindness in half of the visual field of one or both eyes.

Hemiparesis
Muscular weakness or partial paralysis of one side of the body.

Hemorrhagic Stroke
A stroke caused by a bursting blood vessel in the brain that spills blood into the brain (see page 5).

Incontinence
Lack of control over excretory functions (urination, bowels).

Ischemic Stroke
A stroke caused by insufficient supply of blood and oxygen to a part of the brain. Also referred to as CVA.

Magnetic Resonance Imaging (MRI)
A technique used to obtain images of the brain and blood flow to the brain using a magnetic field.

Nasogastric Tube (NG Tube)
A tube that is inserted through the nostrils and passed into the stomach, through which food and liquids are given.

Neglect
A condition in which the individual is unable to sense some part of his or her world, usually on either the right or left side of the brain.

NPO
Nothing by mouth, a diet restriction sometimes ordered by the physician.

Orientation
Accurate awareness of one's identity, location and the current date.

Occupational Therapy (O.T.)
Therapy that assists the patient in managing activities of daily living.

Paralysis
Inability to move a muscle or a group of muscles voluntarily.

Paresis
Weakness of a muscle or a group of muscles.

Patent
Term used to describe a small hole in the heart between the left and right atrium.

PEG
A feeding tube inserted through the skin into the stomach.

Perseveration
Uncontrolled, involuntary repetition of speech or of an activity.

Physical Therapy (P.T.)
Therapy that helps patients regain the ability to be mobile.

Prognosis
Prediction of the course and outcome of a disability or disease.

Range of Motion (ROM)
The amount of movement possible in a joint, measured in degrees.

Sensation
Information received by the brain through the senses of sight, touch, smell, taste, hearing and movement.

Spasm
An involuntary muscular contraction.

Spasticity
Increased resistance or contraction in the muscle, usually caused by damage to a part of the brain that controls movement.

Stenosis
Reduction in size of a vessel or other opening.

Stroke
See "Ischemic Stroke" and "Hemorrhagic stroke".

Thrombectomy
A procedure to physically remove a blood clot from a large blood vessel in the brain.

Transfers
Methods of getting into and out of a wheelchair or a chair, or moving from standing to a bed, toilet, car, tub, shower or floor and back again.

Thrombolytics
Thrombolytic (Clot Buster) drugs help reestablish brain circulation by dissolving blood clots that obstruct blood flow. Most thrombolytics are plasminogen activators - they activate the factors in the blood that ultimately break up a blood clot. To be effective, thrombolytic therapy should be administered as quickly as possible after the onset of stroke symptoms.

Notes

hoag.

Pickup Family
Neurosciences Institute

One Hoag Drive
PO Box 6100
Newport Beach, CA 92658-6100

949-764-HOAG (4624)
www.hoag.org