

Confluence Health

**STROKE
INFORMATION
BOOKLET**



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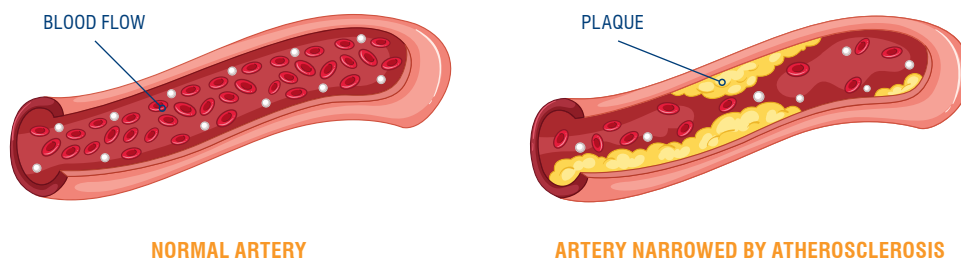
Explanation of a Stroke

WHAT HAPPENS DURING A STROKE

During a stroke, blood stops flowing to the part of the brain where the stroke is happening. Since the brain needs a constant supply of blood to function, the affected area becomes damaged. Each area of the brain has a unique function. When the area has a cut off blood supply, that area of the brain loses its function. Some strokes are caused by a blockage in the blood vessel and other strokes are caused by a vessel in the brain that breaks open (ruptures).

ARTERIES

An artery is what the heart sends blood through to supply the body and brain with blood. The blood has oxygen that the body and brain need to function. The two main arteries in the body are the Carotid and the Vertebral arteries. A group of smaller blood vessels carry oxygen rich blood to all areas within the brain. In a healthy artery, the lining of the wall is firm and smooth which allows blood to freely flow. If an artery is not healthy and has plaque build up from high cholesterol, it becomes brittle and the blood does not flow as easily.



THE EFFECTS OF HIGH BLOOD PRESSURE

Blood pressure plays an important role in circulation. The top number (systolic) is the pressure or the volume of force that pushes the blood through the veins. The higher the number, the higher the force. The bottom number (diastolic) is the force of your heart refilling (your heart at rest). The higher the number, the higher the force. When the top number is higher than 130, there is a risk for the force to break off a clot to cause a stroke, or cause a weak spot in the lining of the vein or artery and cause a hemorrhagic stroke. This is why it is important to pay attention to your blood pressure.

There are several reasons to track your blood pressure:

- Nobody knows what their blood pressure is. It is invisible and unless it is being taken by a blood pressure machine, there is no way of actually knowing if blood pressure is high or not.
- Keeping track of it and writing it down is a helpful and objective tool for the doctor to use when determining whether your medication is working, and if changes need to be made.

Making an Action Plan

HOW YOU CAN PREVENT ANOTHER STROKE

Once you have a stroke or a TIA, you are at an increased risk of having another one. There are several important changes that can reduce your risk of stroke and improve your overall health.

- Keep track of your blood pressure. Take your blood pressure at the same time everyday. Write it down, and show it to your doctor. This is a good tool for your doctor to use because they can see trends in the direction of your blood pressure. If there is a trending climb in blood pressure, your doctor will be able to make a more educated decision as to whether your medication needs to be changed.
- Manage your cholesterol. Take your medications and eat a low cholesterol diet.
- Manage your diabetes. Check your blood sugar levels as directed and keep them within target range.
- Take the recommended blood thinner such as aspirin, as directed. **DO NOT** stop taking your blood thinner unless advised by the doctor.
- Get the flu vaccine every year.

ADOPT A HEALTHY LIFESTYLE

- If you smoke, quit and do not spend time around people who do as second hand smoke is unhealthy also.
- Limit alcohol to 2 drinks a day for men and 1 drink a day for women.
- Being overweight makes it more likely you will develop high blood pressure, heart problems, and diabetes. These conditions make a stroke more likely.
- Exercise and remain as active as possible.
- Eat heart-healthy foods. These include fruits, vegetables, high-fiber foods, fish, and foods that are low in sodium, saturated fat, and trans fat.

DON'T WITHDRAW - YOU ARE NOT ALONE

Having a stroke is a life altering event. Facing these changes may be overwhelming. At times you may feel like withdrawing from family, friends, and community. Staying involved with life will help you get the support you need, and help you live a healthier and happier life. If you are feeling down, seek help. Your doctor can assist you with this.

To keep from withdrawing, try the following:

- **Make time to enjoy life:** Set goals for doing what makes you happy.
- **Try something new:** Focus on your interests and abilities and think of something you would like to try that you have never done before.
- **Continue doing what you enjoy:** If you enjoy playing cards, maybe consider hosting a weekly card game with friends.
- **Reach out to loved ones:** Stay in touch with friends and family. You are not obligated to discuss your health. Keep a list of things you want to talk about and discuss those things on your list.
- **Join a stroke support group:** It can be helpful to talk to people who are going through situations similar to yours.

How Strokes Affect the Brain and Body

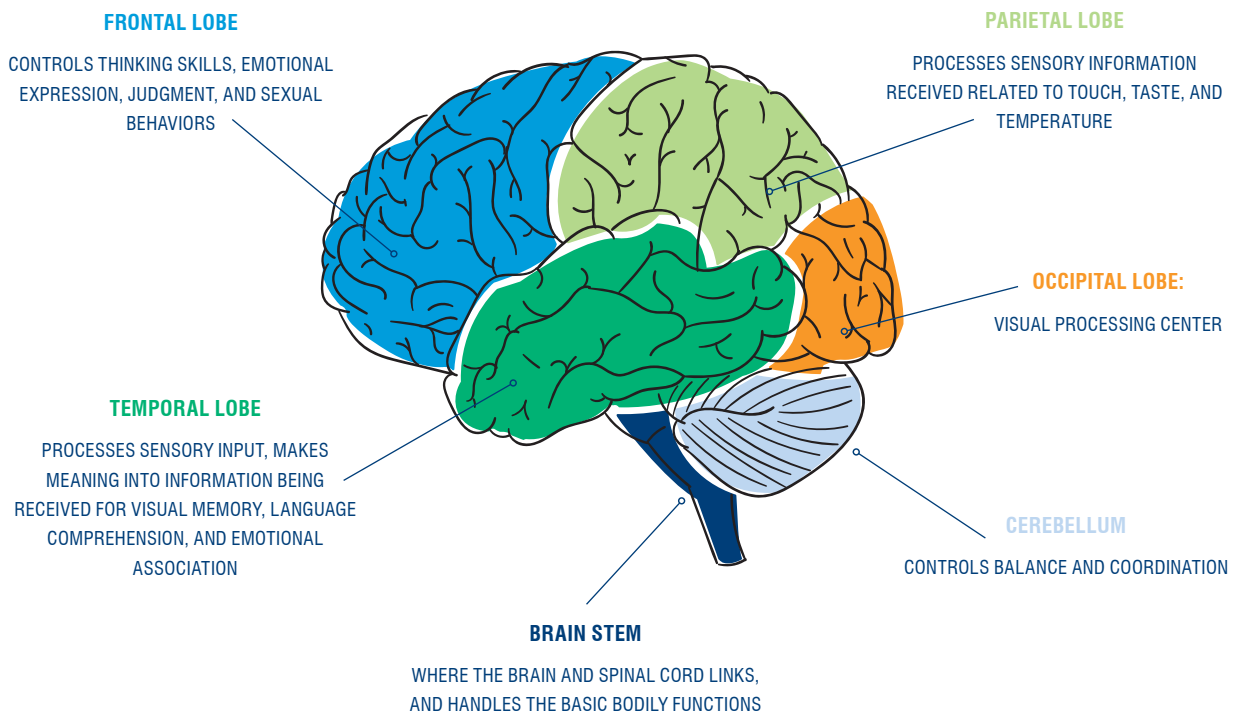
EACH AREA OF THE BRAIN HAS A SPECIFIC FUNCTION RELATED TO THE BODY

When blood supply is cut off from the brain, cells begin to die from lack of oxygen. The area in the brain that has been affected by the stroke will die without oxygen. The type of skills and the amount of loss depends on 2 things: how much tissue was damaged and which part of the brain was affected.

- **Front of the brain:** Controls personality, reasoning, and ability to control emotions.
- **Left side of the brain:** Controls the right side of the body, speech, language, reading, and writing.
- **Right side of the brain:** Controls the left side of the body.
- **Back of the brain:** Controls vision.
- **Brain stem:** Controls breathing and swallowing.

AREAS THAT CONTROL THE BODY

The brain is the body's control center.



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Types of Strokes

All strokes happen in the brain, and since there are different types, they are treated differently. Without enough blood flow, brain cells will begin to die. It is important to identify the **TYPE** of stroke you are having quickly, in order to treat the stroke effectively.

ISCHEMIC STROKE

When an artery in the brain is blocked, it causes an Ischemic stroke. This is the most common type of stroke.

There are 2 types of Ischemic strokes:

- **Thrombotic stroke:** A Thrombotic stroke happens when a blood clot that has formed inside an artery interrupts blood flow, resulting in that area to lose blood flow and oxygen, causing that area to die.
- **Embolic stroke:** An Embolic stroke happens when a blood clot or plaque forms in a large artery that leads to the brain or the heart, and then moves through the arteries to the brain. When it enters the brain, it can block a vessel and leads to a stroke.

HEMORRHAGIC STROKE

A Hemorrhagic stroke happens when a blood vessel in the brain bursts and spills blood into or around the brain.

There are different types of Hemorrhagic strokes:

- **Intracerebral hemorrhage:** Intracerebral hemorrhage happens when a blood vessel bursts and bleeds into brain tissue. When the blood leaves the vessel and pours out onto the brain where it ruptured, brain cells die and that part of the brain stops functioning.
- **Subarachnoid hemorrhage:** Subarachnoid hemorrhage happens when a blood vessel bursts near the surface of the brain and blood leaks between the brain and the skull. This blood causes nearby arteries to spasm, which reduces blood flow to the brain and causes a stroke. This type of hemorrhage is usually caused by a burst aneurysm.
- **Aneurysm:** An aneurysm is an area in the artery that is weak and bulges out into a bubble. When the bubble fills, it weakens and may burst. If it bursts, blood leaks inside or around the brain, causing brain cells and that area around it to die.

Types of Strokes (Cont.)

TRANSIENT ISCHEMIC ATTACK (TIA)

A Transient Ischemic Attack (TIA) happens when an artery within the brain or one that goes to the brain, gets blocked for a short time, causing the blood flow to that area of the brain to slow down or stop. This is sometimes called a mini stroke. The difference between a stroke and a TIA is that the area in the brain that is affected, does not die because blood flow is not interrupted long enough to cause major damage. When a TIA happens, the affected artery either becomes unblocked after a short period of time, or a new path opens up and allows the blood to flow normally. During a TIA, stroke symptoms may occur, and then recover quickly.

A TIA IS A SERIOUS WARNING SIGN THAT YOU MAY HAVE A STROKE

Major symptoms of a TIA include:

- Numbness, weakness, or loss of vision
- Trouble speaking
- Loss of balance or coordination



A TIA usually leaves no permanent damage, however it should be taken very seriously. **If you ever experience symptoms of a stroke or TIA, even if they don't last, CALL 911!**

GET HELP QUICKLY

If you have stroke symptoms:

- Call 911 or have someone else call. Never attempt to drive yourself to the hospital.
- Wait for help to come. Unlock the door if you are able.
- Loosen tight clothing and rest in a comfortable position.
- Do not try to sleep it off.
- Do not ignore the signs or tell yourself they will pass.

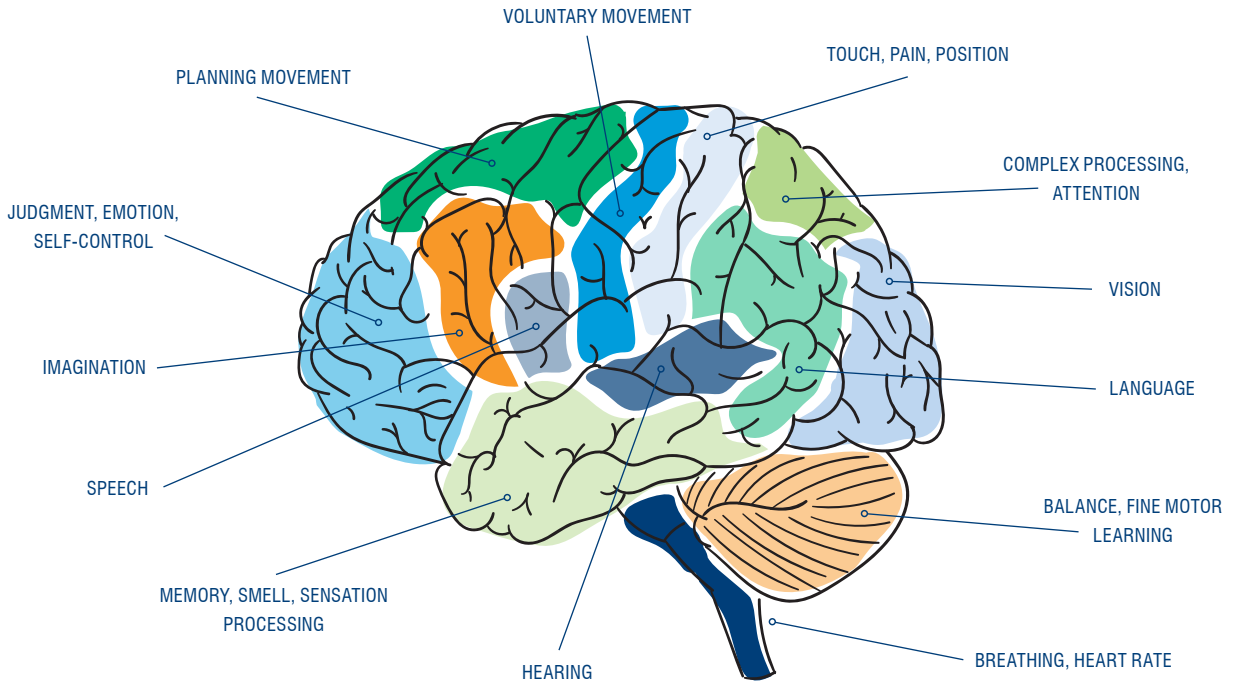
Be aware of sudden changes in:

- Difficulty balancing
- Eyes or vision
- Face drooping
- Arm weakness
- Speech difficulty

CALL 911 IMMEDIATELY!

How a Stroke Affects You

Each area of the brain has a certain function in the body. When a stroke damages that area of the brain, the body function will be affected and may not work as well as it did before the stroke. Strokes cause many problems including: speaking, seeing, feeling, and walking.



SOME EFFECTS OF A STROKE

Memory	Controlling your bladder or bowels	Fatigue	Moving parts of your body	Having seizures
Pain	Seeing	Depression	Thinking	Sleeping

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Right Brain vs. Left Brain

RIGHT BRAIN

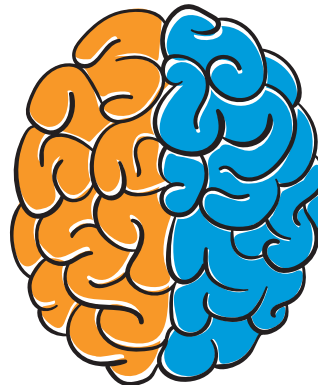
The right side of the brain controls the left side of the body. You use the right side of the brain to do creative things like paint a picture, appreciate art or music, recognize the emotion in someone's voice, or find where you plan to go. If you have a stroke on the right side of your brain you may have trouble with the above mentioned.

LEFT BRAIN

The left side of the brain controls the right side of the body. You use the left side of the brain to figure out math and science problems, and understand what you read and hear. If you have a stroke on the left side of your brain, you may have deficits on the right side of your body.

ARE YOU RIGHT OR LEFT BRAINED?

LINEAR THINKING
DETAIL / FACT ORIENTED
READING / PHONICS / LANGUAGE / TALKING
AUDITORY / LISTENING
LIKES THE "PARTS" BEFORE THE "WHOLE"
LOGICAL
NUMBERS
TIME ORIENTED
PREFERS TRUE / FALSE TO MULTIPLE CHOICE
DOESN'T LIKE TO TAKE RISKS
LOOKS FOR DIFFERENCES
PREFERS THINGS WITH CONCRETE RULES / DEFINITIONS
ASKS "HOW" MORE OFTEN THAN "WHY"



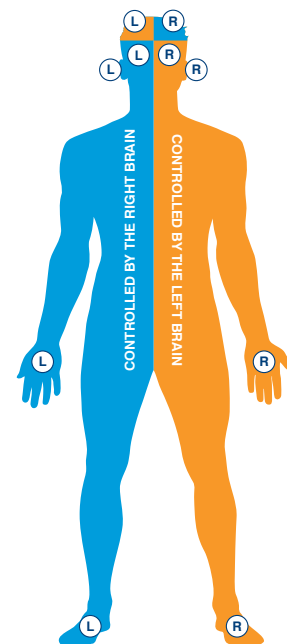
CREATIVITY
LIKES SHAPES / PATTERNS
SINGING / MUSIC / THEATER / ART
VISUALIZATIONS
LIKES TO SEE THE "WHOLE" PICTURE
EMOTIONAL
COLORS
ACTIVE
PREFERS ESSAY TESTS TO TRUE / FALSE
WILLING TO TAKE RISKS
FINDS SIMILARITIES
SENSITIVE TO THOUGHTS / EMOTIONS
ASKS "WHY" MORE OFTEN THAN "HOW"

HOW TO FIND YOUR STRONGER EYE

1. Extend your arms and make a triangle with your thumbs and forefingers.
2. Center a light switch in the triangle.
3. Close each eye.
4. **Which one keeps the switch centered?** That is your stronger eye.

HOW TO FIND YOUR DOMINANT BRAIN

1. Circle the **EAR** you use to listen through a door.
2. Circle which **EYE** is stronger.
3. Circle the **HAND** you use to write or eat.
4. Circle the **FOOT** you use to kick a ball.
5. **Mostly L's:** Right brained. **Mostly R's:** Left Brained.



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What to Expect While You are in the Hospital

TREATING A STROKE

If you are having symptoms of a stroke it is an emergency! **CALL 911 or emergency services right away!** Treatment will begin as soon as medical care reaches you and the type of stroke you are having is determined. Early treatment can help limit damage to the brain and in some cases, early treatment can reverse damage and loss of function.

WHAT TO EXPECT WHILE YOU ARE IN THE HOSPITAL

While in the hospital, your symptoms and the time it occurred will be assessed by a doctor:

- Tests will be done to determine which type of stroke you had and assess the damage that has been done.
- The cause of the stroke will also be determined.
- Tests may include blood tests and imaging scans such CT, MRI, or ultrasound.
- The type of stroke is important to know before treatment is initiated.

ACUTE-PHASE STROKE TREATMENT

Acute-phase treatment occurs during the first minutes of the first hours after you begin having symptoms. The goal of the acute-phase treatment is to minimize the damage from the stroke. It begins as soon as the doctor knows what type of stroke you had and where in the brain it occurred.

This involves one or more of the following:

- Medication to dissolve clots (Ischemic stroke).
- Medication to prevent blood clots (Ischemic stroke).
- Procedures to stop bleeding (Hemorrhagic stroke).
- Tests to look for damage from the stroke.

Meet Your Stroke Team

While you are in the hospital, you will be seen by people on the stroke team. The stroke team consists of: hospitalists, physician assistant, neurologist, nurses, certified nursing assistants, case management, social worker, pharmacist/pharmacy tech, therapists, and the stroke mobile outcomes nurse. You may also see several doctors who are specialized (focuses) in an area you may be having issues with besides the stroke, such as kidneys, internal bleeding, urology, cardiac, or GI track issues.

HOSPITALIST

A hospitalist is the doctor who handles your care while in the hospital. You may see several hospitalists during your stay as they rotate. You will not see these doctors once you leave the hospital. Your information will be sent to your primary care physician and he/she will take over your care at your follow up visit.

NURSES

You will see many nurses during your stay at the hospital because their shifts rotate. They usually work 12-hour shifts. You will usually have a day shift nurse and a night shift nurse, and sometimes during a shift you may be assigned a different nurse. The nurse will give you your medications, treatments, and help with discharge planning. If you start to have issues, the nurse will report them to the hospitalist.

CNA (CERTIFIED NURSING ASSISTANT)

A CNA will work with the nurse who is caring for you. They will take your vital signs, make sure your meals are ordered, help you to the bathroom, change your sheets, check your blood sugar if needed, and help with providing comfort, safety and quality care.

CASE MANAGEMENT

A case manager will help with planning for you to go home. They will talk with you and your family and will help you with any discharge problems.

PHYSICIAN ASSISTANT

A physician assistant will assist in carrying out your care under the supervision of a hospitalist. They will adjust your medications and plan of care as needed.

NEUROLOGIST

A neurologist is a doctor who practices in the study of the brain. They will figure out the best way to treat your stroke. They will help the hospitalist make decisions about your care.

Meet Your Stroke Team (Cont.)

SOCIAL WORKER

If needed, a social worker will help with in home care giving, meals on wheels, and give you helpful community information.

PHARMACIST / PHARMACY TECH

A pharmacist or pharmacy tech will talk to you about your medications and manage the changes that may be made to your medications.

THERAPISTS

You may see several therapists during your hospital stay. They will look at your strength for mobility and activities of daily living, such as: eating, showering, speech, and swallowing.

PHYSICAL THERAPIST

A physical therapist will work with you on large motor skills such as: walking, climbing stairs, getting out of bed, or other mobility issues.

OCCUPATIONAL THERAPIST

An occupational therapist will work with you on your activities of daily living, such as: dressing, grooming, showering, eating, or other issues with self-care.

SPEECH THERAPIST

A speech therapist will help you with swallowing problems, speech, or communication problems. They will review your needs and help with a plan to safely look at any issues in those areas.

STROKE MOBILE OUTCOMES NURSE

The stroke mobile outcomes nurse will give you information about, risk of stroke and lowering your risk for stroke, emotional support, and questions that come up. The goal of the stroke outcomes nurse is to give extra help and support during your stay in the hospital, and also once you are home. You will be given a direct phone number to call with questions or concerns, and you will receive a phone call 30 days after your stroke to make sure your needs are being met.

Common Disabilities Caused by a Stroke

SPEECH AND LANGUAGE

Difficulty speaking, reading, writing, or difficulty being able to understand what someone else is saying.

HEMIPARESIS (MOVEMENT)

Weakness or paralysis on one side of the body. This is caused by the area in your brain that controls movement being affected by the stroke.

CHANGES IN EMOTION

Your reaction may have little or no clear connection with what is happening.

SENSES

Your affected body part may not be able to feel when something or someone touches it. Your hearing or sight may be affected also.

DEPRESSION

It is common after a stroke to feel sad and become depressed about the new disabilities you may be facing. Sometimes the injury to the brain can cause depression. Depression is serious and must not be ignored. There are many treatments that can be used to assist with decreasing depression.

PERCEPTION PROBLEMS

If the stroke occurs on the right side of the brain, your ability to judge distance, size, position, rate of movement, form, and the way parts relate to the whole is affected. This may affect the way you are able to care for yourself.

BEHAVIOR CHANGES

You may act different from how you used to before the stroke. Things that used to bother you, may not bother you anymore.

MEMORY CHANGES

Strokes often cause memory problems.

Common Disabilities Caused by Stroke (Cont.)

SWALLOWING AND NUTRITION

If your stroke has caused difficulty with swallowing, it is called dysphagia. Dysphagia can increase your risk of choking, and can lead to aspiration (movement of food or fluid into the lungs). A thorough evaluation can help determine how swallowing has been affected by a stroke, which may include tests such as a barium swallow. Therapists can work with you to help improve swallowing. Eating and nutritional needs will also be addressed.

Symptoms of Dysphagia:

- Problems getting food or liquids to go down on the first try.
- Gagging, choking, or coughing when you swallow.
- Having food or liquids come back up through your throat, mouth, or nose after you swallow.
- Feeling like foods or liquids are stuck in some part of your throat or chest.
- Pain with swallowing.
- Pressure or pain in your chest or heartburn.
- Weight loss because you are not getting enough food or liquid.

IMPROVING MUSCLE CONTROL

Exercises can help improve muscle control for better swallowing. Some strengthen muscles and others improve tongue movement and lip closure. Work with your therapist on exercises that meet your needs. Complete the exercises as instructed. They can be hard at first, but with effort you can improve. If you tend to cough when you eat and drink, be sure to let your therapist know.

TIPS FOR EATING AND DRINKING

Problems swallowing can make it hard to eat. This should be addressed to prevent nutrition problems and weight loss.

Below are some tips that may be helpful:

- When eating and drinking, sit up as straight as possible.
- Take only small bites of food and sips of fluid.
- Eat slowly and chew food well before trying to swallow.
- Make sure you have cleared all food from your mouth before you take another bite or sip.
- Follow any advice you are given about body position. For example, turning your head to a specific side or tilting your head can sometimes help when swallowing.

FOOD AND DRINK TEXTURE

Certain food textures and thicknesses can be swallowed more easily and safely than others. Thickeners may be added to liquids to make them safer to swallow. Work with your therapist to assist you with the diet texture that will be safe for you.

Planning for Discharge and Rehabilitation

While you are in the hospital, therapists will be working with you to make recommendations for your discharge planning.

Several things will be considered regarding your discharge:

- Mobility
- Safety
- Ability to swallow
- How much help you will need at home

DISCHARGE OPTIONS

Depending on what has been affected, and the level of care you may need, therapists will determine which discharge option would be the most beneficial to your needs.

- Home
- Inpatient rehabilitation (acute rehabilitation)
- Sub acute rehabilitation
- Home with outpatient therapy
- Home with home health



Home is always the goal, but sometimes further rehabilitation will help you to be more successful at home, especially if you need a lot of assistance. Rehabilitation can help you work on what has affected you most, and help you to have increased independence once you go home.

Stroke Rehabilitation

The best way to get better after a stroke is to start stroke rehabilitation. In stroke rehab, a team of health professionals will work with you to regain abilities you lost due to the stroke.

Rehab helps you:

- Do as well as you can and be as independent as possible.
- Learn to live with the changes to your brain and body caused by the stroke.
- Adjust to living within your home, family, and community.

Rehab begins while you are in the hospital. After leaving the hospital, you can continue treatment at a rehab center or at home. Some rehab programs offer at least 3 hours of therapy a day, 5 or 6 days a week.

An important part of rehab is taking steps to prevent a future stroke. To stay in good health you may need to take medications and make some lifestyle changes, such as smoking cessation. Work with your rehab team to decide what type of exercise, diet, or other lifestyle choices are best for you.

It is important to start rehab soon after a stroke and do a little every day because the greatest chance of regaining your abilities is in the first few months after a stroke.

The greatest improvements in function usually happen during the first 6 months. Rehab often continues for several months after a stroke. Recovery can continue beyond 6 months and ongoing effort is needed even after a formal rehab program has ended. Continued effort can pay off in helping you return to independence.

INPATIENT REHABILITATION (ACUTE REHABILITATION)

This is recommended for patients who have multiple medical issues, require a high degree of physician involvement, in a coordinated and intensive program of multiple medical specialties, and who are in need of a more intensive, but short term inpatient therapy program.

Acute rehabilitation admission criteria requires that you must:

- Be medically stable
- Functional limitations of recent onset
- 24 hour rehab nursing
- 2 or more therapy disciplines: PT, OT, and/or ST
- You are able to participate and benefit from at least 3 hours of therapy, spread throughout the day
- Discharge goal is a community setting: home, assisted living, or adult family home

SUB ACUTE REHABILITATION

This is less intense than acute rehabilitation. You will receive a minimum of 1 hour a day of therapies, 5 days a week. You only need to demonstrate a need for 1 therapy discipline, PT, OT, or ST. Sub acute rehabilitation is a good setting for patients with limited activity tolerance and/or whose functional progress may take longer to recover.

Your Rehabilitation Team

REHABILITATION DOCTOR

The rehab doctor is in charge of your medical care after a stroke. This may be a physiatrist (a doctor who specializes in physical medicine and rehabilitation), a neurologist, or a primary care doctor.

REHABILITATION NURSE

A rehab nurse specializes in nursing care for people with disabilities. They can provide nursing care and help doctors coordinate medical care. A rehab nurse can also educate both you and your family about recovering from a stroke.

RECREATIONAL THERAPIST

A recreational therapist can help you return to activities that you enjoyed before the stroke, such as playing cards, gardening, bowling, or doing church and community activities. Recreational therapy can also help you practice and relearn physical activities and thinking skills needed for activities you enjoy.

PHYSICAL THERAPIST

A physical therapist evaluates and treats problems with movement, balance, and coordination. A physical therapist can provide you with training and exercises to improve walking, getting into and out of bed or a chair, and moving around without losing your balance. A physical therapist also teaches your family members how to help with exercises and how to help you move or walk, if needed.



"physical-therapist-assisting-old-woman-stretching-with-green-exercise-band: Designed by freepik: Freepik.com" This booklet has been designed using resources from Freepik.com.

Your Rehabilitation Team (Cont.)

OCCUPATIONAL THERAPIST

An occupational therapist will help you to relearn abilities that you lost as a result of your stroke. They may have you do exercises and practice activities so that you can learn to do the things you could before, such as eating, bathing, dressing, writing, or cooking. You may not be able to do these activities the same way as before, so they will teach you new ways to do them.

SPEECH / LANGUAGE THERAPIST

A speech/language therapist can help you get back to your language skills and learn other ways to communicate. The speech/language therapist may teach your family members how to improve communication with you. Speech/language therapists also work with people who have swallowing problems caused by the stroke.

SOCIAL WORKER

A social worker can help you and your family make decisions about rehabilitation and plan your return to a new living place if you are unable to return home. They can help you and your family answer questions about insurance, other financial issues and can help you with a variety of support services. Social workers also provide or arrange for counseling to help cope with emotional adjustments after a stroke.

LICENSED COUNSELOR OR PSYCHOLOGIST

A professional counselor or a psychologist can give counseling to help you or your family members adjust and cope after a stroke. Counselors may use interviews and tests to identify and understand where you are having trouble. They may help you with thinking or memory problems or may work with other professionals to help you.

ORTHOTIST

An orthotist can fit you with special braces, splints, or footwear that help with movement, correct deformity, and relieve pain.

DIETITIAN

A dietitian can help you plan a balanced diet during rehab. You may need a special diet if you have swallowing problems. The dietitian may also educate your family about helping you stay on a healthy diet after you leave the rehab program.

VOCATIONAL COUNSELOR

A vocational counselor can help you find a job or get back to work after a stroke.



Never believe that a few caring people can't change the world. For, indeed, that's all who ever have.

- Margaret Mead

Stroke Clinic and Stroke Mobile Program

We understand that the effects of a stroke do not leave once you are discharged from the hospital. The stroke clinic will address your needs, goals, barriers and assist with a successful transition. We are here to help you understand why you had a stroke, and how to prevent having another one.

HOW IT WORKS

At your stroke clinic visit, you will see a Neurology Advanced Practice Provider. A Neurology Advanced Practice Provider is a mid-level medical practitioner who works under the direct supervision of a licensed doctor. The Neurology APP will review with you why you may have had a stroke or TIA, and your medical risks for having another stroke and prevention will be thoroughly discussed. Your questions and concerns will be addressed, and a plan of action will be made to try and reduce your risk of having another stroke or hospital re-admission.

MOBILE PROGRAM

A year-long mobile program will be offered to patients who meet specific criteria established by the Stroke Program.

- The Stroke Mobile Registered Nurse will come to your home for a monthly visit to assess your needs and assist with goal setting and attainment of your personal and objective goals set by you and your provider. The focus is to address and decrease risks that may lead to another stroke.
- Alternatively, some patients will receive a **30-day, 90-day, and 1-year** follow-up call, and will receive the direct phone number to the Stroke Mobile RN to call if questions or concerns arise.

The Stroke Mobile Program is free of charge and is a benefit to assist with staying home and out of the hospital. We look forward to serving you!

- **Stroke Mobile Phone:** 509-668-6166
- **Stroke Clinic and Stroke Mobile Program:** confluencehealth.org

Taking Medications

You may be prescribed new medications depending on what type of stroke you have had, and to cover other health issues you may have. It is important for you to know what medications you are taking, why you are taking it, and how to take it. Take medications on time and as directed. If you are having trouble with your medications, or if your medications are not working for you, make sure you let your doctor know how you feel.

TAKING MEDICATION SAFELY

Each medication that is prescribed has a specific purpose. **Not taking medications as directed will put your health at risk.** There are a lot of tools available to help you keep track of your medications.

STAY ON SCHEDULE

- Have a routine for taking medications.
- Take medications at a set time and as directed.
- Set an alarm daily to remind you to take your medications.
- Make sure to refill prescriptions when you still have a weeks worth of medications. If you use mail order pharmacies, make sure you have more than a weeks worth when you reorder.

UNDERSTANDING SIDE EFFECTS

- Side effects are unwanted effects of the medications you are taking.
- Symptoms of side effects may be dizziness or nausea.
- If you are having side effects, contact your medical team, as changes to your medications may need to be made.

BEWARE OF MEDICATION INTERACTIONS

If you are taking vitamins, herbal supplements and over-the-counter drugs, be sure to tell your doctor as they may interact or be dangerous to take with certain medications. If you have a medication list of the medications you were taking before your stroke, please show it to your doctor.

QUESTIONS YOU MAY WANT TO ASK THE PHARMACIST OR YOUR DOCTOR

- What is the name of the medication, and does it have a generic name?
- What is this medication for, and how does it work?
- When should I take it and what time of day?
- How much should I take?
- What happens if I miss a dose and what should I do?
- What are the side effects and what should I do if I have side effects?
- Are there any special instructions to follow while taking medications?
- Are there any foods to avoid while taking medications?
- How long will I need to take this medication, and when I run out, should I order more?

Medication General Safety Tips

Taking more than one medication at a time can be confusing.

Use these helpful tips:

- Get organized and have someone double check your medications to catch any mistakes that may have been made.
- Fill all your medications at the same pharmacy every time. If you need to change pharmacies, ask for a copy of your records from the pharmacy you have been using.
- Generic medications may look different from name brand medications. If your pills look different, make sure you ask the pharmacist about it as it may be the wrong dosage, or wrong medications.
- If you have allergies, make sure to make them known to your doctor and pharmacist.
- Do not split your medications to save money. If you have trouble paying for your medications, talk to your doctor or pharmacist. There are ways to get assistance with medications.
- **Do not share your medications with anyone EVER!**
- Keep your medications stored in a cool, dark, dry place. A steamy bathroom may ruin your medications.

ANTICOAGULANT SAFETY (BLOOD THINNERS AND ANTI-PLATELETS)

Some anticoagulants need to be monitored closely to make sure levels remain constant in your blood. And if you are injured and you are on anticoagulants, it may be harder to stop your bleeding.

To be safe:

- If you miss a dose of your anticoagulant, ask your doctor or pharmacist what to do. Do not take a double dose.
- Make sure you take the **EXACT** dosage of your medication.
- Make sure to carry an ID card or wear a Medic-Alert bracelet to inform people you are on an anticoagulant.
- Make sure your healthcare team is aware of the medications you are taking.
- **DO NOT STOP** taking your anticoagulant without talking to your healthcare provider who prescribed it.

Making a Medication Plan

It is important for your health to take your medications on time and as directed. If your plan is not working for you, talk to your doctor before making any changes.

The following tips will help you make a plan that will work:

- If you are not able to swallow medications, ask if there is a liquid option. Before crushing pills or breaking them, make sure you talk to your pharmacist or doctor. Some medications cannot be crushed or broken.
- If you cannot afford your medications, talk to your pharmacist or doctor, there are often ways to get help. Do not take a lower dosage of your medications to save money.
- If you have side effects that bother you, make sure to talk with your doctor.
- Never stop taking your medications without first talking with your doctor. Stopping medications could be very harmful to your health.
- Make sure you know what will happen if you stop taking your medications or do not take medications as directed.
- Keep a list of medications, supplements, vitamins, and over the counter drugs, and show your list to your healthcare providers.
- If blood work needs to be monitored with certain medications, make sure you do that and do not miss an appointment.

SAMPLE MEDICATION LIST

Using a chart like this one makes it easy to keep track of your medications. Keep a copy of it with you in your purse or wallet, this can be helpful in an emergency situation. Also, take a copy with you to your doctor appointments in case there are questions or concerns you may have regarding your medications.

Name of Medication	Strength of Medication	Description of Medication	How Many to Take at Each Dose	How to Take the Medication	Special Instructions	What is the Medication For?	Who Prescribed Medication?
Generic: Levothyroxine Brand: Synthroid	112 mcg	Pink oblong tablet	1	1 tablet by mouth every day	Take in the morning on an empty stomach	Thyroid	Dr. Smith

Learn about Quitting Smoking

Quitting smoking isn't easy, but if you smoke, quitting is the best thing you can do for your health. Smoking increases your risk for cancer, diabetes, heart failure, and other serious medical problems. Still, if you've been smoking for a long time, it can be very hard to quit. You might worry about withdrawal symptoms or that your craving for a cigarette might be too strong to ignore. But with some support, you can do it. Our topics can give you the help you need to finally quit smoking and start leading a healthier life today.

WHY DO YOU WANT TO QUIT?

Think about why you want to quit. Maybe you want to protect your heart and your health and live longer. Or maybe you want to be a good role model for your kids or spend your money on something besides cigarettes. Your reason for wanting to change is important. If your reason comes from you and not someone else, it will be easier for you to try to quit for good.

ARE YOU READY TO QUIT?

Maybe you have already taken your last puff or are **ready to quit today**. That's great. This information will help you keep your resolve to kick the habit for good.

WHY IS IT SO HARD TO QUIT SMOKING?

Quitting is hard because your body depends on the nicotine in tobacco. Giving it up is more than just kicking a bad habit. Your body has to stop craving the nicotine. Nicotine gum, lozenges, patches, and other medicines can help reduce the cravings without the harmful effects of smoking.

You also have to change your habits. You may not even think about smoking, you just do it. You may not realize it, but seeing someone smoke, or just seeing cigarettes, may cause you to want to smoke. You may smoke when you drink alcohol or when you are stressed. Or maybe you have a cigarette with coffee. Before you quit, think of new ways to handle these things.

For example:

- Call a friend
- Practice deep breathing when you feel stressed
- Try chewing sugarless gum instead of smoking
- Go for a walk when you have a break at work

When you first start your quit, it's okay to stay around nonsmokers, and it's okay to avoid situations where you may be tempted to smoke (like occasions where alcohol will be served) until you feel more confident about staying smoke-free.

Learn about Quitting Smoking (Cont.)

WHAT IF YOU FEEL BAD WHEN YOU ARE TRYING TO QUIT?

You are likely to crave cigarettes and to have withdrawal symptoms. You may feel grouchy, restless, or you may have a hard time concentrating for the first 2 to 3 weeks after you quit. It may be hard to focus on tasks, or you may have trouble sleeping and want to eat more. But you won't feel bad forever, and medicine can help. Using medicines and products like nicotine gum or patches can help with cravings and make it easier to resist smoking.

WILL YOU GAIN WEIGHT IF YOU QUIT SMOKING?

You may worry about gaining weight after you stop smoking. This is understandable. In fact, many smokers do gain weight during their quit attempt. In your plan to quit smoking, include eating healthy snacks and doing some physical activity to help you avoid weight gain during your quit.

If you do gain weight, you can focus on losing it after you have successfully quit smoking. Be patient with yourself and try to tackle one change at a time.

You can take steps to lower your chance of gaining weight:

- Try to be active. Exercise can also improve your mood and reduce your craving for a cigarette.
- If you haven't been getting much exercise, start walking every day, gradually increasing how far you walk, or take a beginning yoga class.
- If you are already active, see about joining others for a sport you enjoy, such as: biking, hiking, or playing volleyball.
- Eat more fruits, vegetables, whole grains, and eat fewer high fat foods. Cutting back on food (dieting) can make quitting smoking harder.
- Try not to substitute food for cigarettes. Instead, chew gum, or chew on a drinking straw or a coffee stirrer.
- Use quit-smoking medicines or nicotine replacements. They may make gaining weight less likely while you are quitting smoking.

Learn about Quitting Smoking (Cont.)

HOW CAN YOU QUIT?

Quitting smoking is hard! Some people who have quit say that it was the hardest thing they have ever done, but most smokers eventually are able to quit smoking. You don't have to do it alone. Ask your family, friends, and doctor to help you. Get what you need to help you quit for good.

After you know your reasons for wanting to quit, use the U.S. Surgeon General's five keys to quitting:

GET READY

If you're ready to quit right now, go ahead, medicines and support can help you stay on track. But if you want to plan ahead, you don't have to stop right away. Set a date to quit. Pick a time when you won't have a lot of stress in your life. Think about cutting down on smoking before your quit date. You can try to decrease the number of cigarettes you smoke each day as a way to quit smoking. Get rid of ashtrays, lighters, or spit cups before you quit. Talk to your partner or friends about helping you stay smoke-free. Don't let people smoke in your house.

LEARN NEW SKILLS AND BEHAVIORS

Change your routine. For example, if you smoke after eating, take a walk instead.

GET SUPPORT

Seek help from:

- **The national tobacco quit line:** 1-800-QUITNOW (1-800-784-8669)
- Free smartphone, tablet, or handheld computer apps, such as the **National Cancer Institute's QuitPal**
- A text messaging program from **www.smokefree.gov** called **SmokefreeTXT**
- Internet programs, such as **www.smokefree.gov**, which also have chat rooms
- Doctors, nurses, or therapists for counseling
- A friend who has quit smoking

GET AND USE MEDICINE

It can help with cravings and stress, and it doubles your chances of quitting smoking. You can buy nicotine gum, lozenges, or patches without a prescription. Your doctor may also prescribe medicine, such as bupropion (Zyban) or varenicline (Chantix). If you take varenicline, you can stop smoking a little bit at a time, which may increase your chance of quitting.

BE PREPARED FOR RELAPSE

After you quit, try not to smoke at all, not even one puff. Prevent a slip (smoking 1 or 2 cigarettes) or relapse (returning to regular smoking) by avoiding smoking triggers, at least at first. These triggers can include: friends who smoke, alcohol, and stress. Don't keep cigarettes in your house or car. If you do slip, stay calm. Remind yourself that you have a plan, and think about how hard you've worked to quit for good.

Get Ready

PLANNING YOUR STRATEGY TO QUIT

Learn what works for you. When it comes to quitting smoking, some people find it helpful to plan ahead. Others don't. Do what works for you. If you have tried to quit in the past, review those past attempts. Think of the 3 most important things that helped in those attempts, and plan to use those strategies again this time. Think of things that hindered your success, and plan ways to deal with or avoid them. Write this down as a plan.

Start by asking yourself some questions. Are you a goal setter? How confident do you feel that you will succeed at giving up smoking? Asking yourself these questions is one way to prepare yourself for quitting.

KNOW YOUR REASONS

Your reason for wanting to quit is important. Maybe you want to protect your heart and your health and live longer. Or maybe you want to spend your money on something besides cigarettes. If your reason comes from you, and not someone else, it will be easier for you to try to quit for good.

CONTACT YOUR DOCTOR

Contact your doctor or local health department to learn about medicines and to find out what kinds of help are available in your area for people who want to quit smoking. Telephone helplines operated by your state can also help you find information and support for quitting smoking.

CONTACT YOUR INSURANCE PROVIDER

Check with your insurance provider to find out if medicines and counseling are covered under your health plan. Your employer may also help pay the cost of a quit smoking program or provide help to pay for medicines, even over-the-counter ones.

TECHNOLOGY

Free smartphone and tablet apps may be another helpful way to plan your quit. Apps such as the National Cancer Institute's QuitPal can help you set goals, track your progress, and share your struggles and successes with family and friends. QuitPal can also support you with text reminders.

Get Ready (Cont.)

OTHER WAYS TO GET READY

- **Set your goals clearly:** To achieve a long-term goal like quitting smoking, you may find it helpful to break the task into smaller goals. Every time you reach a goal, you feel a sense of pride along the path to becoming tobacco-free. A personal action plan can help you reach your goals. Write down your goals, or tell someone what you are trying to do. Goals should include “by when” or “how long” as well as “what”. For example: “I will track my smoking for 1 week, starting tomorrow.” Or “I will cut back from 20 cigarettes a day to 15 by this time next week.”
- **Pace yourself:** You may want or need to quit slowly by reducing the number of cigarettes you smoke each day over the course of several weeks. Set a comfortable pace. Certain activities won’t be temptation-free for many months after you quit.
- **Set a quit date, and stick to it:** This is an important step. Choosing a good time to quit can greatly improve your chances of success. Avoid setting your quit date on high-stress days, such as holidays.
- **Reward yourself for meeting your goals:** Quitting smoking is a difficult process, and each small success deserves credit. If you don’t meet a goal, don’t punish yourself. Instead, hold back on a reward until you achieve your goal. For example, give yourself something special if you succeed.
- **Be realistic:** You may feel very excited and positive about your plan for change. Be sure to set realistic goals, including a timeline for quitting that you can meet. For example, your goal could be to cut back from 20 cigarettes a day to 10.



Learn New Skills and Behaviors

Since you won't be smoking, decide what you are going to do instead.

Make a plan to:

- Spend time with nonsmokers and people who have stopped smoking.
- Cut down on stress. Calm yourself or release tension by reading a book, taking a hot bath, or digging in your garden.
- Change your daily routine. Take a different route to work or eat a meal in a different place. Every day, do something that you enjoy.
- Start seeing yourself as a person who is making healthy choices.

MAKE SOME CHANGES

- Get rid of all cigarettes, ashtrays, and lighters after your last cigarette.
- Throw away pipes or cans of snuff.
- Get rid of the smell of smoke and other reminders of smoking by cleaning your clothes and your house, including curtains, upholstery, and walls.
- Take the lighter out of your car.
- Don't let people smoke in your home.
- Try some methods to reduce smoking, such as gradually increasing the time between cigarettes, before your official quit date.
- A smoking tracker can help you keep track of what triggers urge you to use tobacco. This gives you important information on when it's toughest for you to resist.

Get Support

You will have a better chance of quitting successfully if you have help and support from your family, friends, and coworkers.

Others sources of support include:

- **Friend:** Talk to a friend who used to smoke, and ask him or her to be a support person you can call when the going gets rough.
- **Your doctor:** He or she can help you put together a plan of medicines and nicotine replacement therapy (NRT) that works for you. This could be Chantix or the nicotine patch, or maybe the nicotine patch along with gum for those times you need something more.
- **Social networking:** Many smartphone or tablet quit smoking apps allow you to share your progress with your friends and family. This is a way you can get the extra support and encouragement you need when you're having a hard time or when you want to celebrate a new smoke-free milestone.
- **Phone support (1-800-QUITNOW):** Telephone counselors can help you with practical ideas. Often they are people who have quit smoking themselves.
- **Internet:** Try a quit smoking program on the Internet, these often have chat rooms. People who use telephone, group, one-on-one, or Internet counseling are much more likely to stop smoking than people who try to quit on their own.



Get and Use Medicine

SHOULD I USE MEDICINE?

You may want to have a say in this decision, or you may simply want to follow your doctor's recommendation. Either way, this information will help you understand what your choices are so that you can talk to your doctor about them.

Your options:

- Use medicine to help you quit smoking. This may include nicotine replacement products.
- Don't use medicine.

The U.S. Food and Drug Administration (FDA) has approved several medicines to help people quit smoking. You will **double your chances** of quitting even if medicine is the only treatment you use to quit. Your odds get even better when you combine medicine and other quit strategies, such as counseling.

You won't have to take medicines forever, just for as long as it takes to help you quit. Your employer or health plan may help pay the cost of a quit smoking program or provide help to pay for medicines. Remember that no matter how much it costs to buy medicines to help you stop smoking, it's still less than the cost of smoking.

FIRST-CHOICE MEDICINES

- **Nicotine replacement therapy:** This includes nicotine gum, patches, lozenges, and inhalers. You can buy gum, patches, and lozenges without a prescription.
- **Bupropion SR (Zyban):** This is a non-nicotine prescription medicine that reduces withdrawal symptoms and cravings.
- **Varenicline (Chantix):** This prescription medicine helps with withdrawal symptoms, cravings and it reduces the pleasure you feel from smoking.

KEY POINTS TO REMEMBER

Using medicines and nicotine replacement products (patches, gum, lozenges, and inhalers) can double your chances of quitting smoking. They can relieve nicotine cravings and withdrawal symptoms. Taking medicines and using telephone or in-person counseling or a quit smoking program at the same time, can also greatly increase your chances of success.

- Getting counseling, along with using medicine, can increase your chances of quitting even more.
- If you smoke fewer than 10 cigarettes a day, you may not need medicines to help you quit smoking.
- It's rare for someone to get addicted to nicotine medicines, because the nicotine is released slowly at low levels into your bloodstream.
- Nicotine replacement products may cause some side effects, such as problems with sleep or red and itchy skin with the patch. Medicines in pill form can cause nausea, dry mouth, and trouble sleeping. For most people, the side effects aren't bad enough to make them stop using the medicines.
- Nicotine medicines have less than half of the nicotine of cigarettes, and by itself, nicotine is not nearly as harmful as smoking. The tars, carbon monoxide, and other toxic chemicals in tobacco cause the harmful effects.
- Many insurance companies will pay for all or part of the cost of medicines used to quit smoking.

Be Prepared for Relapse

Most people are not successful the first few times they try to quit smoking. If you start smoking again, don't feel bad! A slip or relapse is just a sign that you need to change your approach to quitting.

IF YOU SLIP

A slip of just 1 or 2 cigarettes can lead back to regular smoking, but many smokers can get back to not smoking by changing their plan. For example, you may add counseling or a medicine, or both. Talk to a friend who quit smoking successfully, and find out how they did it. Think about when you want to try again. Make a date, and stick to it! Keep trying, and don't be fooled into thinking that smoking "light" cigarettes will help. They do not make smoking safer.

If you slip or smoke a little, don't give up. Talk to someone who has quit smoking, or to a counselor, to get ideas of what to do. If you are taking medicine or using nicotine replacement, keep doing so unless you go back to regular smoking.

Quitting smoking is hard, but it can be done. To stay motivated, keep reminding yourself why you want to quit smoking. Make a list of your reasons to quit and the benefits you expect from quitting. Put your list of reasons on your bedroom dresser, in your wallet, or on the refrigerator. Review it whenever you are struggling with the quitting process. Add to your list whenever another reason or benefit occurs to you. If you have tried to quit smoking before, remember that most people try to quit many times before they are successful. Don't give up!



Eating to Improve Health

WHY HEALTHY FOOD?

Food has an effect on your health. Eating healthy foods will benefit you. It will provide the nutrients required for your body to function properly. Eating unhealthy, processed food may fill you, or be enjoyable to eat, however, it is not going to benefit your health. Healthier eating helps with managing stroke risk factors such as cholesterol levels, weight, and blood pressure.

Changing the way you eat may seem like a very big task, taking one step at a time, may make it easier. It is important not to change everything at once. Start making small healthier changes. A good place to start is to decrease fat and sodium intake. Decreasing both of those will help with managing cholesterol and blood pressure levels.

EATING FOR HEALTH

Some stroke risk factors are linked to what and how much you eat. Eating a healthier diet will improve your blood pressure levels. Improving your blood pressure will help protect your arteries. If you have weight issues or diabetes, healthy eating can help you manage them.

HEALTHY EATING

Making healthy changes does not mean you have to give up the food you love. Healthy eating starts with learning new ways to eat.

Add more:

- Fruits
- Vegetables
- Whole grains

Cut back on foods that have a lot of:

- Fat
- Salt
- Sugar

AIM FOR BALANCE

Most days, eat from each food group: grains, protein, vegetables and fruits, and dairy. Listen to your body. Eat when you're hungry. Stop when you feel satisfied.

LOOK FOR VARIETY

Be adventurous. Choose different foods in each food group. For example, don't reach for an apple every time you choose a fruit. Eating a variety of foods each day will help you get all the nutrients you need.

PRACTICE MODERATION

Don't have too much or too little of one thing. All foods, if eaten in moderation, can be part of healthy eating. Even sweets can be okay occasionally.

HEALTHY EATING IS NOT THE SAME AS GOING ON A DIET

Healthy eating is not a diet. It means making changes you can live with and enjoy for the rest of your life. Diets are temporary. Because you give up so much when you diet, you may be hungry, think about food all the time, and after you stop dieting, you also may overeat to make up for what you missed. Eating a healthy, balanced variety of foods is far more satisfying, and if you match that with more physical activity, you are more likely to get to a healthy weight and stay there, than if you diet.

Creating Healthy Habits

Sometimes our habits lead us to make less than healthy food choices. It is best to start with a few new healthy habits and build from there.

HOW TO MAKE HEALTHY EATING A HABIT

- Why do you want to eat healthier? Having a specific reason and goal makes follow through easier and more meaningful.
- Do you want to improve your health?
- Do you want to feel better?
- Are you trying to set a good example for the people around you?

THINK ABOUT SMALL CHANGES YOU CAN MAKE

Pick ones that are realistic for you:

- Don't try to change everything at once.
- Set an easy goal you can reach, like having a salad and a piece of fruit each day.
- Make a long-term goal as well, such as having one vegetarian dinner a week.



Why Pay Attention to What You Eat?

Healthy eating will help you get the right balance of vitamins, minerals, and other nutrients. It will help you feel your best, have plenty of energy, and can help you handle stress better. Healthy eating is one of the best things you can do to prevent and control many health problems.

Those may include health problems such as:

- Heart disease
- High blood pressure
- Type 2 diabetes
- Some types of cancer

DIABETES: LOWER YOUR RISK FOR HEART ATTACK AND STROKE

It is not fully understood how diabetes affects the heart. Heart disease can be caused by high blood sugar, insulin resistance, high cholesterol, and high blood pressure. Genetics and lifestyle may also affect a person's risk. For example, if you smoke, you are at a higher risk for heart and blood vessel disease than someone who does not smoke. Smoking causes fluctuation in veins and arteries, which causes them to be brittle and weak.

Diabetes raises your risk of heart disease, meaning your risks of heart attack and stroke are higher when you have diabetes. Diabetes is plenty to keep up with as it is, and that explains why dealing with both heart risk and diabetes can seem like too much all at once.

It is also true that good heart health care has a lot in common with good diabetes care. Most healthy choices that help control your diabetes also help your heart. Add a few heart healthy habits, and you will lower your heart disease risk.

Your risk of having heart disease is even higher if you have:

- **High cholesterol:** This causes the buildup of a kind of fat inside the blood vessel walls. This buildup can lower blood flow to the heart muscle and raise your risk for a heart attack.
- **High blood pressure:** This pushes blood through the arteries with too much force. Over time, this damages the walls of the arteries.
- **Kidney damage:** This shares many of the risk factors for heart disease, such as: high blood sugar, high blood pressure, and high cholesterol.

Getting Started

Unhealthy choices can lead to a cycle that's tough to break. You might feel bad about your eating choices after you make them, which can lead to more bad choices. Or, you might not feel your best when your body doesn't get the nutrition it needs.

YOU CAN BREAK THIS CYCLE

Start with making healthy eating a little easier and more convenient. Make it a priority even when you're stressed or busy.

Here are a few ideas to get you thinking:

- Keep healthy snacks with you. You can put snacks in your car, keep some at work, or keep them around the house. Try an apple or a banana, or a pre-packed fruit cup (no sugar added).
- Make a list of quick, easy-to-prepare meals at home. Think salad greens paired with tuna, turkey breast, or poached chicken. Or, a soup made with low sodium broth and fresh or frozen vegetables. You can also make the meals ahead of time and freeze them to save for busy nights.
- Have low or no sugar drinks on hand. Keep a supply of healthier drinks at work or at home.
- Buy pre-cut veggies, or slice them on your day off. Then they'll be ready to eat on busy workdays.

Food Group	Limit Foods that are High in Unhealthy Fats	Make Healthier Choices
Meat, poultry, and fish	Regular ground beef, fatty or highly marbled cuts, spare ribs, organ meat, poultry with skin, fried chicken, fried fish, fried shellfish, lunch meat, bologna, salami, sausage, hot dogs	Extra-lean ground beef (97% lean), ground turkey breast (without skin added), meats with fat trimmed off before cooking, skinless chicken, low-fat or fat-free lunch meats, baked fish
Dairy products	Whole milk and 2% milk, whole milk yogurt, most cheeses, cream cheese, whole milk cottage cheese, sour cream, ice cream, cream, half-and-half, whipping cream, nondairy creamer, whipped topping	Low-fat (1%) or fat-free milk and cheeses, low-fat or nonfat yogurt
Fats and oils	Coconut oil, palm oil, butter, lard, shortening, bacon and bacon fat, stick margarine, peanut butter that has been hydrogenated (the no-stir kind)	Canola oil, olive oil, peanut oil, soft margarines with no trans fats and no more than 1/3 of the total fat from saturated fat, natural peanut butter that has not been hydrogenated
Breads and cereals	Breads in which fat or butter is a major ingredient, most granolas (unless fat-free or low-fat), high-fat crackers, store-bought pastries and muffins	Regular breads, cereals, rice, corn tortillas, pasta, low-fat crackers, choose whole grains as much as possible
Fruits and vegetables	Fried vegetables, coconut, vegetables cooked with butter, cheese, or cream sauce	All fruits and vegetables that do not have added fat
Sweets and desserts	Ice cream, store-bought pies, cakes, doughnuts and cookies made with coconut oil, palm oil, or hydrogenated oil, chocolate candy	Fruit, frozen yogurt, low-fat or nonfat versions of treats such as ice cream, cakes and cookies made with unsaturated fats and/or those made with cocoa powder

Understanding Fats

FAT-FREE FOODS

Sometimes a fat-free food isn't the best choice. Fat-free cookies, candies, chips, and frozen treats can still be high in sugar and calories. Some fat-free foods have more calories than regular ones. Eat fat-free foods in moderation, as you would other foods.

- To get more omega-3 fatty acids, have fish twice a week. Add ground flaxseed to cereal, soups, and smoothies. Sprinkle walnuts on salads.
- When you bake muffins or breads, replace part of the fat ingredient (oil, butter, margarine) with applesauce, or use canola oil instead of butter or shortening.
- Read food labels on canned, bottled, or packaged foods. Choose those with little saturated fat and no trans fat.

WISELY CHOOSE THE FATS YOU EAT

Choose "good fats" and decrease eating "bad fats".

Unsaturated Fats	Saturated Fats	Trans Fats
OKAY	LIMIT	AVOID
Unsaturated fats are found in nuts, olive oil, seeds, canola oil, peanuts, and avocados. It is also found in some fish. In small amounts, unsaturated fats are good for your body.	Saturated fats cause plaque buildup in the arteries. They are mostly found in animal foods like meat and dairy, including red meat, chicken, sausage, port, cheese, milk, cream, butter, and other processed snack foods.	Trans fats are not healthy for the body. Trans fats may be found in snack foods, stick margarine, pastries, and deep-fried foods. Look for "hydrogenated" in the ingredients list. This is a sign of trans fats.



How to Shop for Food

It is time to form new shopping habits. Make a list before going and stick to what is on the list. It is easy to impulse shop, so try to avoid doing that.

Here are some tips for smart shopping:

- **Produce section:** Start here and build meals around produce rather than meat. Fresh vegetables and fruits do not have added sugar and almost no sodium or fat.
- **Meat counter:** Buy chicken or fish instead of red meat. Avoid smoked or cured meats, they are high in sodium. Beans, tofu, and nuts are also good sources of protein, they can be used as an alternative to meat.
- **Dairy section:** Incorporate low-fat or non-fat dairy instead of whole milk. Cheese and ice cream should only be an occasional treat.
- **Snack food section:** It is good to avoid this aisle and choose vegetables and fruits instead. If you have a favorite snack, choose low sodium, lower sugar versions and eat smaller amounts. Read labels carefully as a lot of snack foods often contain trans fat.
- **Frozen food section:** Avoid pre-packaged and frozen foods, frozen dinners are often high in sodium and fat. Try plain frozen food that do not have sauces.
- Read the nutrition facts label on all packaged foods. If it is high in sodium or fats, it's best not to buy it.
- Do not let your guard down at the grocery store, it can be very tempting to buy easy and already prepared food. These foods may be easy, but they may also be harmful to your health.

NUTRITION FACTS LABELS

Be smart when you shop and shop the perimeter of the store. Buy foods like fruits and vegetables, low-fat dairy, whole grains, lean meat, and beans. Avoid pre-packaged processed foods, however if you do buy packaged foods, read the nutrition facts labels. Choose items that help you meet your nutritional goals.

Nutrition Facts		
Serving Size 10 oz.		
Serving Per Container 5		
Amount Per Serving		
Calories 200	Calories From Fat 200	
% Daily value*		
Total Fat 10 g		35%
Saturated Fat 1.5g		11%
Trans Fat 0.0 g		
Cholesterol 0 mg		
Sodium 210 mg		15%
Total Carbohydrate 15 g		3%
Dietary Fiber 2 g		3%
Sugars 3 g		
Protein 30 g		

SERVING SIZE: ALL THE VALUES ON THE LABEL. IF YOU EAT MORE THAN ONE SERVING, ALL OTHER VALUES ON THE LABEL INCREASE.

CALORIES FROM FAT: THE CLOSER THIS NUMBER IS TO THE TOTAL CALORIES, THE MORE FAT THE FOOD CONTAINS. THIS NUMBER SHOULD BE LESS THAN A 1/3 OF THE TOTAL CALORIES.

TOTAL FAT: TOTAL AMOUNT OF ALL FATS PER SERVING.

SATURATED FAT: LOOK FOR FOODS WITH LITTLE OR NO SATURATED FAT. IT RAISES CHOLESTEROL LEVELS AND LEADS TO CLOGGED ARTERIES.

TRANS FAT: THIS IS WORSE THAN SATURATED FAT FOR YOUR HEART. LOOK FOR FOODS WITH NO TRANS FAT.

SODIUM: LIMIT SODIUM TO 1,500 MG OR LESS PER DAY, UNLESS YOU ARE TOLD OTHERWISE BY YOUR DOCTOR.

DIETARY FIBER: HELPS WITH DIGESTION AND CHOLESTEROL CONTROL. 14 G OF FIBER FOR EVERY 1000 CALORIES YOU EAT IS A GOOD GOAL.

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How to Shop for Food (Cont.)

PACKAGING TERMS

Don't let packaging claims confuse you, these claims are defined by law.

What It Says	What it Means
Fat free	Less than 0.5 g fat per serving
No trans fat	Less than 0.5 g trans fat per serving
Low in saturated fat	1 g or less saturated fat per serving
Low fat	3 g or less fat per serving
Reduced fat	At least 25% less fat than standard version
Sodium free, salt	Less than 5 mg sodium or salt per serving
Very low sodium	35mg or less sodium per serving
Low sodium	140 mg or less sodium per serving
Reduced sodium, less sodium	At least 25% less sodium than standard version
Light in sodium	50% less sodium than standard version
Unsalted, no salt added	No salt added during processing (but may still have sodium, check the label)
Natural, healthy	These claims have no nutritional meaning

Tips for Healthier Meals

TIPS FOR COOKING

- Try adding flavor without salt. Using herb blends, lemon juice, pepper, or flavored vinegars adds flavor without adding salt.
- Instead of cream or cheese sauces, use tomato and vegetable based sauces instead. Use natural cooking juices over meat instead of gravy.
- Add garlic, onions, and peppers to add flavor to beans and rice instead of salt.
- Try main dishes that use whole wheat pasta, brown rice, dried beans, or vegetables.
- Chill soups and stews after you cook them so that you can skim off the fat after it gets hard.
- Use cooking methods with little or no fat, such as broiling, steaming, or grilling. Use cooking spray instead of oil. If you use oil, use a monounsaturated oil, such as canola or olive oil.
- Trim fat from meats before you cook them. Drain off fat after you brown the meat or while you are roasting it.

TIPS FOR MEALTIME

Mealtime should be fun and enjoyable!

- Drink water with meals instead of soda, fruit juices, or sports drinks.
- Cut down on meat portions. Meat should be the smallest portion of your plate. Think of meat as a side dish instead of as the main part of your meal.
- Fill up on fruits, vegetables, and whole grains.
- If you prefer to end a meal with something sweet, choose frozen fruit.
- Turn off your computer or TV, and sit down at a table to enjoy your meal. This will help you savor the food, and if you are having swallowing issues, will help you to concentrate.
- Drinking alcohol is not recommended. Ask your healthcare provider whether you should avoid alcohol. If you do, have no more than 1 glass (for women) or 2 glasses (for men) per day.

Eating Out

If you eat out often, it may be hard to avoid unhealthy fats.

Try these tips:

- Order foods that are broiled or poached rather than fried or breaded. Restaurants often use trans fats (hydrogenated oils) for frying foods.
- Cut back on the amount of butter or margarine that you use on bread. Use small amounts of olive oil instead.
- Order sauces, gravies, and salad dressings on the side, and use only a little.
- When you order pasta, choose tomato sauce rather than cream sauce.
- Ask for salsa with a baked potato instead of sour cream, butter, cheese, or bacon.
- Don't upgrade your meal to a larger size. Watch portion sizes. Share an entree, or take part of your food home to eat as another meal. Share appetizers and desserts.

SODIUM

For many people, eating out is something they do to relax and socialize. You don't have to give this up when you are on a low sodium diet, but it is important to be more careful about what you order in a restaurant. Sodium isn't just in table salt. You can also find it in sodium citrate, sodium bicarbonate (baking soda), and monosodium glutamate (MSG). Asian foods often have MSG as well as soy sauce, which is also high in sodium. However, with some planning and helpful tips, you can still enjoy eating out while limiting the sodium in your diet.

- Restaurant foods are usually high in sodium.
- Most restaurants are willing to prepare your food with less or no sodium, if you ask.
- Food can still taste good and be low in sodium.



Sodium Intake

WHY EAT LESS SODIUM (SALT)?

The mineral sodium is a mineral that is found in many foods. It can contribute to health problems, such as making high blood pressure worse. It is easy to eat more sodium than needed as it is hidden in fast food and packaged products. Ask your doctor about the amount of daily sodium that is best for you. After a stroke, it is commonly suggested to eat less than 1,500 mg a day, which is less than 1 teaspoon of salt.

SUGGESTIONS FOR REDUCING SODIUM (SALT) INTAKE

Take one step at a time, this will allow your taste buds to adjust. Slowly add healthier foods and take out high sodium foods. It doesn't have to be hard, however you need to do more than just not use the salt shaker. After all, almost all foods contain sodium naturally or as an ingredient.

You can start reducing the sodium in your diet by:

- When choosing foods with sodium in them, choose the one with the lowest amount of sodium in it.
- Try a salt-free herb blend and take the salt shaker off the table.
- Choose salt-free or low sodium canned foods.
- Pre-made wraps and sandwiches can be very high in sodium and should be avoided.
- Look for “heart-healthy” food on the menu when at a restaurant. “Heart-healthy” is usually lower in sodium.
- Read labels to see how much sodium foods contain.
- Limit packaged foods and restaurant foods, which typically are high in sodium.
- Do not add salt to your food during cooking or at the table.
- Use low sodium spices and sauces to add flavor to your food. Low sodium foods can still be tasty!
- Remember that the biggest source of sodium in the diet is not salt added at the table. In general, the biggest source of sodium is processed foods and foods from restaurants.
- Processed foods include canned foods, frozen dinners, and packaged foods such as crackers and chips. They also include dry mixes, such as those you add to hamburger or noodles.

Sodium Intake (Cont.)

GET SOME HELP

- Talk with your doctor about sodium. Learn how eating too much sodium may affect you and how much you may need to cut back. Have questions ready to ask.
- Talk with a registered dietitian (RD). An RD can help you find out how much salt you are eating and find ways to cut back on salt. An RD can also teach you how to choose low salt foods when eating out and make suggestions for low sodium recipes and meals.
- If you don't cook for yourself, let those who help you know that you want to eat less sodium. Show this information to family members, friends, senior centers or other organizations.
- If you'd like, keep a sodium record. It can show you how much sodium you eat at a meal or during the day. If you have heart failure, use a record that allows you to also record your weight.

COOK WITH LESS SODIUM

- Use fresh fruits, vegetables (or frozen vegetables) and fresh meat. These contain less sodium than canned foods or meats like lunch meat, bacon, ham, and jerky.
- Pick dairy products that are lower in salt such as milk and yogurt instead of cheese.
- If you use canned vegetables, drain and rinse them with fresh water. This removes some, but not all, of the salt. Or choose "no salt added" canned vegetables.
- Flavor your food with garlic, lemon juice, onion, vinegar, herbs, and spices instead of salt. Make your own salt-free seasoning, salad dressings, sauces, and ketchup without adding salt.
- Take the salt shaker off the table to avoid adding salt to your food.
- Try using half the salt a recipe calls for.
- Don't cook with (or drink) softened water.
- Try a low sodium cookbook. It can be a big help if you aren't sure how to reduce the salt in your cooking.



Limiting sugar intake will decrease calories and weight gain. Foods with a lot of sugar are high in calories and can contribute to unhealthy cholesterol levels. Avoiding sugary drinks such as pop, sports drinks, and juices and limiting candy, desserts, and packaged baked goods will be beneficial to your health.

How to Find Sodium

If you know how much sodium is in foods, you can have more flexibility in what you eat. If you eat one high sodium food, you can balance it with very low sodium foods during the rest of the day. Use the nutrition facts on food labels and learn how to find sodium. This includes finding hidden sodium, keeping track of milligrams of sodium, and understanding what labels such as “low sodium” mean.

NUTRITION LABELS

The nutrition facts label allows you to compare similar foods or to check whether the food is a good source of a nutrient. The % Daily Value section can tell you whether a food is high or low in a particular nutrient. If you want to limit a certain nutrient (such as saturated fat or sodium), choose foods with a lower % Daily Value.

Serving sizes of similar foods are the same on all nutrition facts labels, to make comparing foods easier. There may be more than 1 serving in each container. This can make a difference when you are watching your calories and nutrients. The % Daily Value is based on 2,000 calories a day. You may need more or less than 2,000 calories a day. You can see how many calories you need each day at www.choosemyplate.gov.

YOU WILL FIND THIS LABEL ON MOST FOODS

Nutrition Facts

Serving Size 10 oz.
Serving Per Container 5

Amount Per Serving

Calories 200	Calories From Fat 200
% Daily value*	
Total Fat 10 g	35%
Saturated Fat 1.5g	11%
Trans Fat 0.0 g	
Cholesterol 0 mg	
Sodium 210 mg	15%
Total Carbohydrate 15 g	3%
Dietary Fiber 2 g	3%
Sugars 3 g	
Protein 30 g	
Vitamin D 2 mg	15%
Calcium 220 mg	35%
Potassium 3 mg	16%
Iron 3 mg	16%

LIMIT THESE NUTRIENTS (points to Total Fat, Saturated Fat, Trans Fat, Cholesterol, Sodium)

QUICK GUIDE TO % DAILY VALUE
5% OR LESS IS LOW
20% OR MORE IS HIGH

GET ENOUGH OF THESE NUTRIENTS (points to Dietary Fiber, Vitamin D, Calcium, Potassium, Iron)

FIND HIDDEN SODIUM

Sodium can be found in many substances. Many canned, other processed foods and some medicines can contain sodium. Check the ingredients list on food labels for the word “sodium.” Sodium can be hidden in foods.

Be careful about using products that have these ingredients:

- Monosodium glutamate, or MSG (often added to Chinese food)
- Sodium citrate
- Sodium sulfite
- Sodium caseinate
- Sodium benzoate
- Sodium hydroxide
- Disodium phosphate

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How to Find Sodium (Cont.)

SODIUM IN MEDICINES

Check your medicines.

Sodium may be an ingredient in:

- **Prescription medicines:** Talk with your doctor about whether the medicines you take contain sodium.
- **Nonprescription medicines:** Many medicines that you can buy without a prescription contain sodium. Read the labels. If you aren't sure if a medicine contains sodium, talk with a pharmacist. Be sure to check with your doctor before taking any new nonprescription medicine.

SODIUM RECORD

Use a form to record the sodium content of the foods you eat or drink each day. This record will help you see whether you are getting the prescribed daily amount of sodium in your diet.

Make a chart with 3 columns and as many rows you need for meals and snacks. In the first column, record your meals, in the second column, record what you eat or and drink, and in the third, record the total number of milligrams or grams of sodium in the meal.

Take this record with you when you visit your health professional.

Example: My doctor recommends that I have _ milligrams (or _ grams) of sodium in my diet each day.

Meal	Foods and Beverages Consumed During the Meal	Total Milligrams (or Grams) of Sodium in Each Meal
Breakfast		
Snack		
Lunch		
Snack		
Dinner		

Mediterranean Diet

The Mediterranean diet is a way of eating rather than a formal diet plan. It features foods eaten in Greece, Spain, southern Italy and France, and other countries that border the Mediterranean Sea.

- The Mediterranean diet emphasizes eating foods like fish, fruits, vegetables, beans, high-fiber breads and whole grains, nuts, and olive oil. Meat, cheese, and sweets are very limited.
- The recommended foods are rich with monounsaturated fats, fiber, and omega-3 fatty acids.
- The Mediterranean diet is like other heart-healthy diets in that it recommends eating plenty of fruits, vegetables, and high-fiber grains.
- With the Mediterranean diet, an average of 35% to 40% of calories can come from fat. Most other heart-healthy guidelines recommend getting less than 35% of your calories from fat.
- The fats allowed in the Mediterranean diet are mainly from unsaturated oils such as fish oils, olive oil, and certain nut or seed oils (such as canola, soybean, or flaxseed oil), and from nuts (walnuts, hazelnuts, and almonds). These types of oils may have a protective effect on the heart.

BENEFITS OF THE MEDITERRANEAN DIET

A Mediterranean-style diet may help lower your risk for certain diseases, improve your mood, and boost your energy levels. It may also help keep your heart and brain healthy.

The benefits of a Mediterranean-style diet reinforce the benefits of eating a diet rich in fruits, vegetables, fish, high-fiber breads, whole grains, and healthy fats.

For your heart and body, a Mediterranean-style diet may:

- Prevent heart disease
- Lower the risk of a heart attack
- Lower cholesterol
- Prevent type 2 diabetes
- Prevent metabolic syndrome

For your brain, a Mediterranean-style diet might help prevent:

- Stroke
- Alzheimer's disease and other dementia
- Depression
- Parkinson's disease

Mediterranean Diet (Cont.)

STAYING ACTIVE

The Mediterranean diet isn't just about eating healthy foods, it's also about being active. So try to get at least 2½ hours of moderate aerobic activity a week. It's fine to do blocks of 10 minutes or more throughout your day and week.

Choose exercises that make your heart beat faster and make you breathe harder. For example, go for a swim, a brisk walk or bike ride. You can also get some aerobic activity in your daily routine. Vacuuming, housework, gardening, and yard work can all be aerobic.

HOW CAN YOU MAKE THE MEDITERRANEAN DIET PART OF YOUR EATING PLAN?

When eating, there are some simple things you can do to add more of the healthy foods that make up the Mediterranean diet.

The traditional Mediterranean diet calls for:

- **Eating a variety of fruits and vegetables each day**, such as grapes, blueberries, tomatoes, broccoli, peppers, figs, olives, spinach, eggplant, beans, lentils, and chickpeas.
- **Eating a variety of whole-grain foods each day**, such as oats, brown rice, whole wheat bread, pasta, and couscous.
- **Choosing healthy (unsaturated) fats**, such as nuts, olive oil, and certain nut or seed oils like canola, soybean, and flaxseed. About 35% to 40% of daily calories can come from fat, mainly from unsaturated fats.
- **Limiting unhealthy (saturated) fats**, such as butter, palm oil, and coconut oil. Limit fats found in animal products, such as meat and dairy products made with whole milk.
- **Eating mostly vegetarian meals** that include whole grains, beans, lentils, and vegetables.
- **Eating fish at least 2 times a week**, such as tuna, salmon, mackerel, lake trout, herring, or sardines.
- **Eating moderate amounts of low-fat dairy products**, such as milk, cheese, or yogurt.
- **Eating moderate amounts of poultry and eggs.**
- **Limiting red meat to only a few times a month in very small amounts.** For example, a serving of meat is 3 ounces which is about the size of a deck of cards.
- **Limiting sweets and desserts to only a few times a week.** This includes sugar-sweetened drinks like soda.



The Mediterranean diet may also include red wine with your meal, 1 glass each day for women and up to 2 glasses a day for men, however; you should verify this with your doctor.

Mediterranean Diet (Cont.)

TIPS FOR CHANGING YOUR DIET

Here are some things you can do to switch from a traditional Western style diet to a more Mediterranean way of eating:

- Dip bread in a mix of olive oil and fresh herbs instead of using butter.
- Add avocado slices to your sandwich instead of bacon.
- Have fish for lunch or dinner instead of red meat. Brush it with olive oil and broil or grill it.
- Sprinkle your salad with seeds or nuts instead of cheese.
- Cook with olive or canola oil instead of butter or oils that are high in saturated fat.
- Choose whole-grain bread, pasta, rice, and flour instead of foods made with white flour.
- Add ground flaxseed to cereal, low-fat yogurt, and soups.
- Cut back on meat in meals. Instead of having pasta with meat sauce, try pasta tossed with olive oil and topped with pine nuts and a sprinkle of Parmesan cheese.
- Switch from 2% milk or whole milk to 1% or fat-free milk.
- Dip raw vegetables in a vinaigrette dressing or hummus instead of dips made from mayonnaise or sour cream.
- Have a piece of fruit for dessert instead of a piece of cake. Try baked apples, or have some dried fruit.
- Use herbs and spices instead of salt to add flavor to foods.



A dietitian can help you make these and other changes to your diet. You can find information about the Mediterranean diet, recipes, and sample menus online and in cookbooks or videos.

Support

WHERE CAN YOU GET SUPPORT?

Having the support of people close to you is an important part of change. It doesn't matter if you're changing a job, a routine, or how you eat. Support gives you a better chance of making the change work.

Support comes in many forms:

- Support can come from a lot of people. Your family and friends can help you change how you eat, and you can also get help from others. Research shows that getting support from spouses, family members, and friends is important in making behavior changes that affect health.
- It can be positive words and actions, or gentle reminders to stay on track.
- Some people that you may expect to support you may not help you, and may even make it harder for you to succeed.



Diabetes

Diabetes almost doubles your risk of having a stroke because having too much sugar in your blood damages the blood vessels. It can make the blood vessels become stiff and can also cause a build-up of fatty deposits. These changes can lead to a blood clot, which can travel to the brain and cause a stroke.

Even though having diabetes increases your risk of having a stroke, you can live well with diabetes and reduce your risk of a stroke if you follow advice and treatment. By following the advice and treatments given on healthy lifestyle changes, you can make an effective difference to your future health.

TYPE 1 AND TYPE 2 DIABETES

Your body controls the amount of sugar in your blood with a hormone called insulin. Diabetes develops when your body is not able to produce insulin, or the insulin produced does not work properly.

There are 2 main types of diabetes:

- **Type 1 diabetes:** Type 1 diabetes means you can't produce insulin. It often starts in childhood, but adults can get it too. It affects around 10% of people with diabetes. You are more likely to develop type 1 diabetes if you have close family members with the condition.
- **Type 2 diabetes:** Type 2 diabetes means that you don't produce enough insulin, or that your body cells are not responding to insulin. It is mainly an adult disease, and it affects around 90% of people with diabetes. This type of diabetes is strongly linked to being overweight, but you can get it if you are a normal weight. You are at an increased risk of having type 2 diabetes if you have a close family member with the condition. It is more likely to start over the age of 40, and is more common in people from African and Caribbean, South Asian and Chinese ethnic groups. If you are in a high-risk group for type 2 diabetes, ask your physician about having a health check.

SYMPTOMS OF DIABETES

Diabetes tends to develop slowly. Some people are only diagnosed after they have a stroke.

The main symptoms of both type 1 and type 2 diabetes are:

- Increased thirst
- Needing to urinate more than usual
- Feeling very tired
- Unexplained weight loss
- Often having thrush (yeast like fungus in the mouth)
- Cuts or wounds that heal slowly

HOW DIABETES IS DIAGNOSED

Diabetes is diagnosed by a urine test and blood tests. A blood test can determine how much glucose (sugar) is in your blood. A test called the HbA1c blood test shows blood glucose levels for the last 2-3 months. A glucose tolerance test (GTT) checks your blood sugar before and after drinking a sugary drink.

Diabetes (Cont.)

TYPE 2 DIABETES DIAGNOSIS AFTER A STROKE

If you are diagnosed with diabetes after having a stroke, coping with this as well as the effects of your stroke can be tough.

You may feel a range of different emotions about having diabetes. It can take time to adjust to the demands of managing your condition and it can be easy to feel overwhelmed. Try to take it one step at a time. Speak to your physician about how you are feeling, and don't wait for your annual check. Don't be afraid to ask questions, they are there to give you the information and support you need.

PRE-DIABETES

Type 2 diabetes can develop over many years and your blood sugar can rise gradually. If a blood test finds your blood sugar is higher than normal, but not high enough to be diagnosed as diabetes, you might be told you have pre-diabetes. Many people can stop this progressing by making lifestyle changes such as losing weight and being more active. Ask your physician for advice.

MANAGING YOUR DIABETES

Patients with type 1 diabetes are referred to a specialist care team. They need to take insulin for life, manage their diet and exercise to stay fit and active, and keep their blood sugar stable.

If you are diagnosed with type 2 diabetes, you should have help from a team of health professionals including your physician. You will have advice on your diet, foot checks from a nurse or foot specialist, and eye checks by an optician. You should check your blood sugar and blood pressure regularly.

MANAGING TYPE 2 DIABETES THROUGH DIET AND EXERCISE

All diabetics need to stay active and eat a healthy diet to stay fit and well. For type 2 diabetics, it may be possible to achieve a normal blood sugar level by losing weight and being more active. Don't stop taking any medications without speaking to your doctor. Along with treatment, you should get help and advice with making lifestyle changes. Please discuss the options with your primary care physician.

MEDICATIONS FOR TYPE 2 DIABETES

Common medications can include:

- Metformin
- Sulfonylureas
- Glucagon-like peptide-1 receptor agonists
- Pioglitazone
- SGLT2 inhibitors (sodium-glucose co-transporter 2)
- Gliptins (DPP-4 inhibitors)
- Insulin injections

Exercising to Prevent a Stroke

Exercise helps lower high blood pressure, which is an important risk factor for a stroke. Exercise can help you control other things that put you at risk, such as obesity, high cholesterol, and diabetes.

- Exercise to lower your risk of a stroke.
- It is important to exercise regularly.
- Do activities that raise your heart rate.
- Try to do at least 2½ hours a week of moderate exercise.
- One way to do this is to be active 30 minutes a day, at least 5 days a week.
- Or try to do vigorous activity at least 1¼ hours a week. Start slowly and gradually build up your exercise program.



Moderate activity is safe for most people, but it's always a good idea to talk with your doctor before you start an exercise program. You can use your target heart rate to figure out how hard to exercise.

EXERCISE TO PREVENT ANOTHER STROKE

If you have already had a stroke, ask your doctor what type and level of activity is safe for you. Your doctor may recommend ½ to 1½ hours a week of moderate exercise. One way to do this is to be active 30 minutes a day, 1 to 3 days a week. If you are in a stroke rehab program, your rehab team can make an exercise program that is right for you.

LOSS OF FUNCTION

Returning to a normal level of function is one of the goals of stroke rehab. Recovery of function may continue for years with hard work. Sometimes physical function may not return completely. This can be discouraging, however, you must focus on what you can do. Therapists will work with you to regain as much function as possible. They will show you ways to compensate for what is lost.

GET ACTIVE

Exercise helps make your body and your blood vessels healthier. It also helps with risk factors such as decreased blood pressure, and helps stabilize blood sugar and weight. Exercise aids in regaining function sooner, and maintains the gains made in rehab. It also sets up for a healthier future. The healthcare team can recommend safe and appropriate exercises and ways to be active.

MOVING INTO ACTIVITY

After a stroke, activity is essential. It will help with improving balance and function, and decreases your risk factors. Look for simple ways to work movement into every day routine. The more you move, the healthier and happier you will feel. Make a goal of exercising regularly. Work with your physical therapist to set exercise goals that will help your recovery and prevent future problems.

Where to Begin

LOW-INTENSITY EXERCISE

Low-intensity exercise if done daily, also can have some long-term health benefits and lower the risk for heart problems that may lead to a stroke. Low-intensity exercises have a lower risk of injury and are recommended for people with other health problems.

Some low-intensity activities are:

- Walking
- Gardening and other yard work
- Dancing
- Housework

IDEAS

Here are some suggestions to get started. Choose 1 or 2 and when ready, add more:

- Put on music and dance or move to the beat.
- Use the stairs instead of the elevator or escalator, even if going up only one floor.
- Join a garden club, dig in the dirt, and plant a garden.
- Use public transportation instead of a car to run errands.
- Take a daily walk outside. You can walk at the mall if the weather is bad, or you can use a treadmill.
- Park farther away from the building you are going into.
- Play with your kids or grandkids.
- Get up and move during commercials when watching TV.

INCREASE BRISK EXERCISE

Work brisk exercise into your day as much as you can. Brisk exercise increases your heart rate, which makes your heart stronger. It takes time to build up heart rate tolerance, but once you do, you will feel stronger and healthier. A great way to be active is going for walks. Walking on a treadmill at first may be easier. Once you build up tolerance, you may find walking outside more enjoyable. Once exercise gets easier, push yourself a little harder, go for longer periods of time and slowly add more exercises during the week.

CONTINUE THE PACE - DON'T STOP

You may be tempted to cut back on your exercise or even stop completely as your function returns and rehab ends. Do not let this happen! Activity should be a lifelong habit. Finding ways to do activities you enjoy is the key. Join a gym or club, walk, swim, dance, ride a bike, or play a sport. Whatever it is, commit to it, get up and move every day. Do not be discouraged if you miss a day or two, just get back on track as soon as you can!

TRACK YOUR PROGRESS

Using a pedometer to track your steps helps you to see progress. You can wear it on your wrist or clip it to your clothes. You can use your smart phone to download an app that will track your activity. Using the app can help with goal setting and may also help to keep you motivated.

Learn About High Blood Pressure

Blood pressure is a measure of how hard the blood pushes against the walls of your arteries as it moves through your body. Your blood pressure naturally goes up and down throughout the day, but if your blood pressure stays up, you have high blood pressure, or hypertension. When blood pressure is high, it causes damage to your blood vessel walls that gets worse over time. This increases your risk for heart disease, stroke, and kidney problems.

HIGH BLOOD PRESSURE

You and your doctor will talk about your risks of high blood pressure related problems based on your blood pressure. Your doctor will give you a goal for your blood pressure that is based on your health and your age.

Having high blood pressure is serious, but there is good news. There are many ways to manage blood pressure. Our topics cover lifestyle changes that can lower blood pressure such as: eating better, being active, and losing weight. You will also learn how to check your blood pressure at home and weigh the pros and cons of taking medicine to lower your blood pressure.

WHAT CAUSES HIGH BLOOD PRESSURE

In most cases, doctors can't point to the exact cause, but several things are known to raise blood pressure including: being very overweight, drinking too much alcohol, having a family history of high blood pressure, eating too much salt, aging, and the use of tobacco. Your blood pressure may also rise if you are not very active, you don't eat enough potassium and calcium, or you have diabetes or insulin resistance.

- When blood pressure is high, it starts to damage the blood vessels, heart, and kidneys. This can lead to a heart attack, stroke, kidney disease, and other problems. If you don't measure your blood pressure, you won't know when it's high because there are usually no symptoms.
- A home blood pressure monitor makes it easy to keep track of your blood pressure.
- You can check your blood pressure at different times and in different places (such as at home and at work) during the day.
- Checking your blood pressure at home helps you work with your doctor to diagnose and manage your blood pressure. Checking it at home does not replace having it checked by your doctor.

WHAT DO THE NUMBERS MEAN?

Your blood pressure consists of 2 numbers: systolic and diastolic. Someone with a systolic pressure of 130 and a diastolic pressure of 90 has a blood pressure of 130/90, or "130 over 90." Blood pressure is measured in millimeters of mercury (mm Hg).

The first (or top) number is your systolic blood pressure. Systolic pressure is the pressure of the blood in the arteries when the heart pumps. It is the higher of the 2 blood pressure measurements, for example, if the blood pressure is 130/90, then 130 is the systolic pressure.

The second (or bottom) number is your diastolic blood pressure. Diastolic pressure is the pressure in the arteries when the heart rests between beats. This is the time when the heart fills with blood and gets oxygen. A normal diastolic blood pressure is lower than 80. A reading of 90 or higher means you have high blood pressure.

130
—
90

SYSTOLIC
DIASTOLIC

Learn About High Blood Pressure (Cont.)

HOW IS HIGH BLOOD PRESSURE DIAGNOSED?

High blood pressure is usually diagnosed at a doctor's appointment. If you have a high blood pressure at your appointment, your doctor may ask you to monitor it regularly at home and report the results back. If prescribed medication, take it as directed and only quit taking it if your doctor advises you to do so.

WHAT ARE THE SYMPTOMS?

The reason high blood pressure is known as the silent killer is because there are usually no symptoms related with it. Most people don't know they have it until they go to the doctor for some other reason. Very high blood pressure can cause severe headaches and vision problems. These symptoms are likely caused by dangerously high blood pressure also known as a hypertensive crisis, hypertensive emergency, or malignant hypertension. In this case it is a medical emergency.

WHAT CAN YOU DO TO PREVENT HIGH BLOOD PRESSURE?

If you have high blood pressure, your doctor will give you a blood pressure goal based on your health and age. You can help lower your blood pressure by making healthy changes in your lifestyle. If those lifestyle changes don't work well enough, you may also need to take pills. Either way, you will need to control your high blood pressure throughout your life.

Treatment depends on how high your blood pressure is, whether you have other health problems such as diabetes, and whether any organs have already been damaged. Your doctor may also check your risk for other problems, such as heart attack and stroke.

You may also be prescribed medication to lower your blood pressure. You should always take your medication, and never skip a dose. Most people take more than one pill for high blood pressure. Work with your doctor to find the right pill or combination of pills that will cause the fewest side effects.

LIFESTYLE CHANGES

Making lifestyle changes can help you to prevent high blood pressure.

You can:

- Stay at a healthy weight or lose extra weight
- Eat heart-healthy foods and limit sodium
- Exercise regularly
- Limit alcohol to 2 drinks a day for men and 1 drink a day for women

Monitoring your High Blood Pressure

BLOOD PRESSURE MONITORS

There are 2 types of blood pressure monitors:

- **Automatic monitors:** These are easier to use, they do the listening for you.
- **Manual monitors:** These are the kind of device you usually see at the doctor's office and involves using a stethoscope to listen to the blood flow turbulence.

TAKING YOUR BLOOD PRESSURE AT HOME

Before you take your blood pressure:

- Don't eat, smoke, or exercise for at least 30 minutes. Don't use any medicines that can raise blood pressure, such as certain nasal sprays.
- Rest at least 5 minutes before you take a reading. Sit in a comfortable, relaxed position with both feet on the floor. Don't move or talk while you are measuring your blood pressure.
- Try not to take your blood pressure if you are nervous or upset.
- If you can, use the same arm for every reading. Readings may be 10 to 20 mm Hg different between your right and your left arm.

Remember that blood pressure readings vary throughout the day. They usually are highest in the morning after you wake up and move around, decrease throughout the day, and are lowest in the evening. When you first start taking your blood pressure at home, always take your blood pressure 3 times. Wait 1 to 2 minutes between recordings to let the blood flow back into your arm. After you get better at doing it, you probably will need to do it only once or twice each time.

BUYING AND MAINTAINING A MONITOR

A monitor that measures blood pressure in your arm is recommended for most people. Blood pressure monitors used on the wrist aren't as reliable as those that use arm cuffs. Wrist monitors should only be used by people who can't use arm cuffs for physical reasons. Devices that use finger monitors aren't recommended at all.

The size of the blood pressure cuff and where you place it can greatly affect how accurate your device is. If the cuff is too small or too large, the results won't be right. You may have to measure your arm and choose a monitor that comes in the right size.

When you first get a blood pressure device, check its accuracy. Do this by comparing its readings with those you get at the doctor's office. Ask your doctor or nurse to watch you use your device to make sure that you are doing it correctly and that it works right. It's a good idea to have your device checked every year at the doctor's office.



Check your blood pressure cuff often, making sure all the parts of your monitor are in good condition. Even a small hole or crack in the tubing can lead to inaccurate results

Monitoring your High Blood Pressure (Cont.)

USING AN AUTOMATIC BLOOD PRESSURE MONITOR

Follow the steps below:

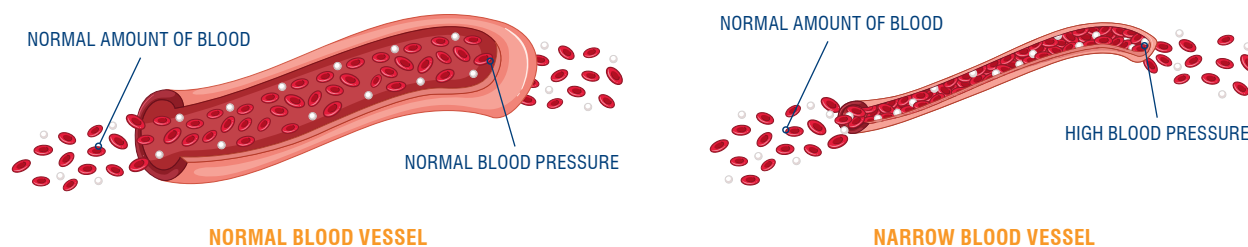
- Sit with your arm slightly bent and resting comfortably on a table so that your upper arm is on the same level as your heart.
- Wrap the blood pressure cuff around your bare upper arm. The lower edge of the cuff should be about 1 inch (2.5 cm) above the bend of your elbow.
- Press the on/off button.
- Wait until the ready-to-measure “heart” symbol appears next to “0” in the display window.
- Press the start button. The cuff will inflate.
- After a few seconds, the cuff will begin to deflate. The numbers on the screen will begin to drop.
- When the measurement is complete, the heart symbol stops flashing. The numbers tell you your blood pressure and pulse.

KEEP A BLOOD PRESSURE DIARY

Keep a blood pressure diary. Blood pressure tends to be higher in the morning and lower at night, however, everyone’s blood pressure changes from day to day and even from minute to minute sometimes. Stress, smoking, eating, exercise, cold, pain, noise, medicines, and even talking can affect it. Your records may help explain changes in your blood pressure readings and help your doctor make sure you get the right treatment.

See some tips below:

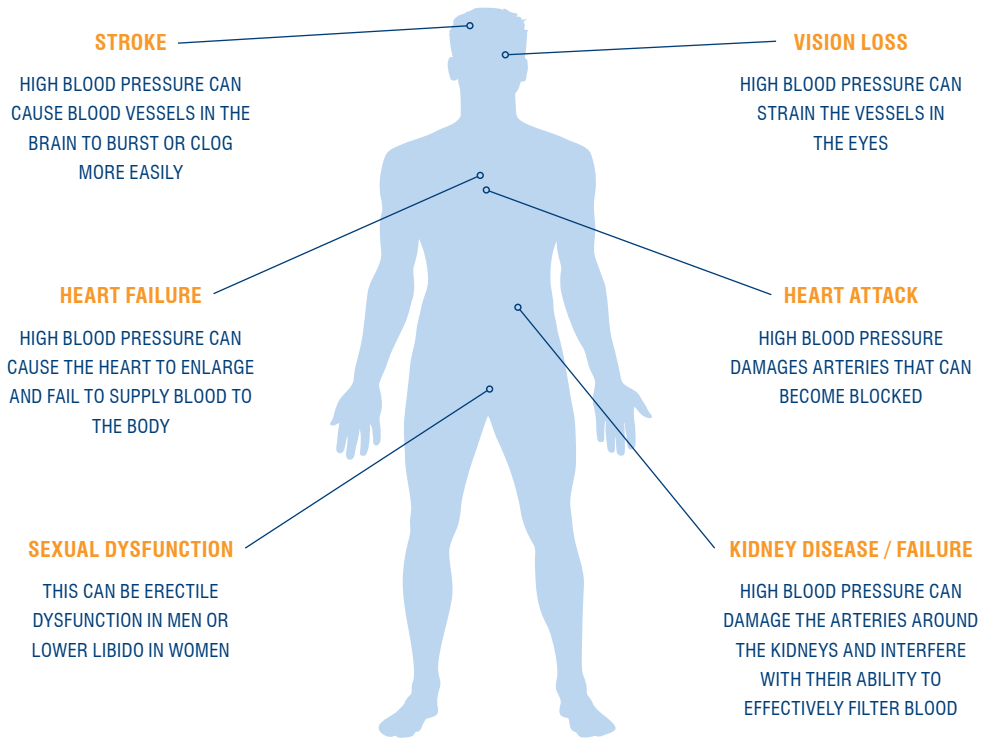
- Record your blood pressure numbers with the date and time. You might use a home blood pressure log or a spreadsheet on your computer.
- Your monitor might have a feature that will record your numbers for you. Some monitors can transfer this information to your computer.
- Record your daily activities, such as the time you take medicine or if you feel upset or stressed.



scientific-medical-infographic-of-atherosclerosis: Designed by brgfx: Freepik.com This booklet has been designed using resources from Freepik.com.

Consequences of High Blood Pressure

High blood pressure is often the first domino in a chain or “domino effect” leading to devastating consequences.



Making Your Home Fall-Proof

Every year, thousands of older adults fall and hurt themselves. Falls are one of the main causes of injury and disability in people age 65 and older. Those who fall once are 2 to 3 times more likely to fall again. Hip fractures are especially serious, and most of them are caused by falling.

Getting around your home safely can be a challenge if you have injuries or health problems that make it easy for you to fall. Many health problems can increase your risk of falling, including: poor eyesight, balance problems caused by disease like stroke or Parkinson's disease, side effects of medicines, weakness or pain in the legs and feet, and confusion or dementia. For people with these conditions, common things like loose rugs, poor lighting, and household clutter can become a big safety issue, however there are easy things you can do to make your home a lot safer.

Key points:

- Some common hazards in the home might make you more likely to fall, but with a few simple measures your home can be much safer.
- Falls can lead to serious injuries. Hitting your head can cause a head injury, and a fall can break a bone, resulting in surgery and months of therapy.
- Preventing falls can help you live a more independent life.
- Talk with your doctor. If you have questions about this information, take it with you when you visit your doctor. You may want to mark areas or make notes in the margins where you have questions.

REDUCE THE CHANCE OF A FALL DURING YOUR DAILY ACTIVITIES

See some tips below:

- Store household items on lower shelves so you do not have to climb or reach high, or use a reaching device that you can buy at a medical supply store. If you have to climb for something, use a step stool with handrails.
- Do not try to carry too many things at the same time. Have a place near your door where you can place packages and groceries while you close the door and get ready to put things away.
- Wear low-heeled shoes with nonskid soles that fit well and give your feet good support. Check the heels and soles of your shoes for wear and repair if needed. Avoid wearing slippers that are loose or don't cover your whole foot.
- Do not wear socks without shoes on smooth floors.

Many falls occur during bathing. To prevent falls in the bathroom:

- Install grab handles and nonskid mats inside and outside your shower or tub.
- Use shower chairs and bath benches.
- Get into the tub or shower by putting the weaker leg in first. Get out of the tub or shower with your strong side first.
- Use a long-handled brush or mittens with straps to help with bathing.

Making Your Home Fall-Proof (Cont.)

You can make some simple changes in your home and in the way you do some daily activities to reduce your risk of falling.

To prevent falls around your home:

- Remove things that you can trip over, such as raised doorway thresholds, throw rugs, and clutter. Repair loose carpet or raised areas in the floor.
- Move furniture and electrical cords out of walking paths.
- Use nonskid floor wax, and wipe up spills right away.
- If you use a walker or cane, put rubber tips on it. If you use crutches, clean the bottoms of them regularly with an abrasive pad such as steel wool.
- Keep your house well lit, especially stairways, porches, and outside walkways. Use night lights in areas such as hallways and bathrooms. Add extra light switches or use remote switches (such as switches that go on or off when you clap your hands) to make it easier to turn lights on if you have to get up during the night.
- Put sturdy handrails on stairways and make sure you have a light at the top and bottom of the stairs. Don't leave items on the steps. Fix loose, broken, or uneven steps. Mark the areas around stairways and ramps with paint or tape, preferably with a high-contrast color.
- If you live in an area that gets snow and ice in the winter, have a family member or friend sprinkle salt or sand on slippery steps and sidewalks.



Making Your Home Fall-Proof (Cont.)

Falls are often caused by hazards that are easy to overlook, but these hazards can also be easy to fix. The following checklist helps you find hazards in each room of your home and gives tips on how to fix the problem.

ROOMS AND AREAS TO CHECK FOR PREVENTING FALLS AT HOME

FLOORS

- Move furniture so that your path through a room is clear.
- Remove throw rugs on the floors or use double-sided tape or a special backing so the rugs won't slip.
- Pick up papers, books, shoes, boxes or other things that are on the floor. Always keep objects off the floor.
- Coil or tape wires (such as extension cords or lamp or phone cords) next to the wall so you can't trip over them. If you need another power outlet, have an electrician install one.

STAIRS AND STEPS

- Pick up papers, shoes, books, or other things on the stairs. Always keep objects off stairs.
- Fix loose, broken, or uneven steps.
- Make sure you have plenty of light in the stairways. Have an electrician put in an overhead light at the top and bottom of the stairs. You can also get light switches that glow.
- If you have burned out lights in the stairway, have a friend or family member change the bulbs.
- Make sure that the carpet is firmly attached to every step, or you can remove the carpet and attach rubber treads to the stairs to prevent slips.
- Fix loose handrails or put in new ones. Make sure the handrails are on both sides of the stairs and span the full length of the stairs.

KITCHEN

- Move items in your cabinets so that the things you use a lot are on the lower shelves (about waist level).
- If you must use a step stool, get one with a bar to hold on to. Never use a chair as a step stool.

BATHROOM

- Put a rubber mat that won't slip or self-stick strips on the floor of the tub or shower.
- Have a carpenter install grab bars inside the tub and next to the toilet.

BEDROOM

- Place a lamp close to the bed where it's easy to reach.
- Put in a night light so you can see where you're walking. Some night lights go on by themselves after dark. You might also turn on an overhead light in the hallway or bathroom before you go to bed.
- Change the height of your bed if you have trouble getting in or out of it. You might try a thinner mattress or a shorter bed frame.
- Don't use sleepwear or bedspreads that are slippery.

Caregiving: Making a Home Safe

FIRE AND CARBON MONOXIDE PROTECTION

Suggestions:

- Install smoke detectors and a carbon monoxide detector in the home, and change the batteries at least once a year.
- Have a plan for getting out of the home if there is a fire. Practice by having a fire drill.
- Keep a fire extinguisher in the kitchen.

SAFE TEMPERATURES

Suggestions:

- Lower the hot water temperature setting to 120°F (49°C) or lower to avoid burns.
- When helping someone bathe, use the back of your hand to test the water to make sure it's not too hot.
- Make sure coffee or tea is not too hot.

GENERAL SAFETY TIPS

You can help protect the person in your care by making the home safe.

Suggestions:

- Pad sharp corners on furniture and counter tops.
- Keep objects that are often used within easy reach.
- Install handrails around the toilet and in the shower. Use a tub mat to prevent slipping.
- Use a shower chair or bath bench when the person bathes.
- Provide good lighting. Put night lights in bedrooms, hallways, and bathrooms.

Preventing Injury in Affected Limbs

After a stroke, you may not feel temperature, touch, pain, or sharpness on your affected side.

You may have:

- Feelings of heaviness, numbness, tingling, or prickling or greater sensitivity on the affected side.
- No sense of how your muscles and joints are operating together, which may affect your balance.

In stroke rehab, you can learn how to prevent injury on your affected side. For example, you might do exercises to gain more range of motion. Your team can also teach you how to position your limb to prevent pain.

FEELING

If you cannot feel an object, you may be more likely to hurt yourself.

Tips for preventing cuts:

- If you have a tendency to clench your fist on the affected arm, keep your fingernails short and smooth so that you do not cut yourself.
- If you cannot feel sensations in your feet, cut and file your toenails straight across so that you do not scratch yourself.
- Soaking your hands and feet may make your nails easier to cut. If you have diabetes, talk with your doctor about the care of your feet.

If you cannot feel heat on your affected side, you may be more prone to burns.

Tips for preventing burns include:

- Test the temperature of bath water or dishwater using your unaffected side.
- Bathe and do dishes in lukewarm water.
- Use pot holders whenever you work near a stove.
- Turn pot handles away from you to prevent spills.
- Wear nonflammable clothes when you cook, and do not wear clothes with long sleeves or ruffles that could get caught in an appliance.

Preventing Injury in Affected Limbs (Cont.)

MUSCLE TONE

If you have poor muscle tone in an arm, you may be at risk for shoulder problems. The weight of an affected arm can cause the shoulder to dislocate (shoulder subluxation). You may also tend to not use the shoulder, which may cause pain and loss of motion (frozen shoulder).

You can help prevent a frozen shoulder by:

- Positioning and supporting your affected arm. For example, wear an arm sling when sitting up or walking.
- Maintaining full movement (range of motion) of the affected joints either by moving your arm or having someone move it for you.
- Not over-exercising your arm. This can cause pain and make exercising more difficult.

SWELLING

Swelling occurs when the affected arm or leg cannot move for a long period of time.

A large amount of swelling:

- Causes reduced blood flow in the limb, which increases your chance of getting skin sores (pressure injuries).
- Limits movement of the limb, which increases your chance of having the joint stiffen (contracture).
- Causes pain and discomfort in and around the swollen tissues.

Tips to prevent swelling in your affected arm or leg include the following:

- Elevate the affected arm or leg. If your arm hangs down at your side for long periods of time, you will have more swelling in the arm.
- Follow your doctor's advice about what daily exercises to do. There are exercises you can do to help drain fluid from the affected arm or leg.
- See a physical therapist. He or she can teach you how to do special massages that can help move fluid out of your arm or leg. You also can learn what activities would be best for you.
- Try compression stockings to keep fluid from building up in your arm or leg. Your doctor or therapist can help you know what size to buy.

Problems with Ignoring the Affected Side

Some people who have had a stroke, ignore or are not aware of one side of their body. This can happen when the stroke damages one side of the brain.

Caregivers may notice signs that the person is ignoring, or neglecting, the affected side, such as:

- Mentioning or responding to stimulation only on the unaffected side of the body.
- Using only the unaffected arm or leg.
- Looking only to the environment on the unaffected side.
- Noticing only someone who speaks or approaches from the unaffected side of the body.
- Responding to only half of the objects he or she would normally see, such as eating from just one side of the plate.
- Not recognizing the affected arm and leg as belonging to his or her body and thinking that they belong to someone else.
- Thinking that objects on the affected side are closer or farther away than they really are. The person may bump into furniture or have trouble eating or dressing.

The doctor/stroke rehab team might give you tips for how to help someone who neglects his or her affected side.

These tips may include:

- When you are working with the person's affected side, reduce distractions on the unaffected side. For example, make sure there are no moving objects or bright lights close to the person on his or her unaffected side.
- Place objects that are needed most often on the person's unaffected side. Encourage use of the affected side by placing some objects (such as the telephone, reading glasses, or a glass of water) on that side, prompting the person to also use the affected side.
- Remind the person to pay attention to the affected side. Sometimes, attaching a small bell or bright ribbon to the affected arm or leg may act as a reminder.
- Point out landmarks on the person's right and left sides when going places. Remember that the person may look at only one side of the environment, so use examples that gets the person to look to both sides. For example, you might say, "Looking out the window over to your right I see that it looks like a rainy day today." Or you might say, "We are driving by our church over here on the left."
- Give frequent cues to help orient the person to the environment. For example, you might say, "It is 3 o'clock in the afternoon on March 21st. It is Wednesday, and we are at the doctor's office. I am your son, and we have been here only a short while."

Spasticity

After a stroke, the injury to the brain can cause muscles to contract or flex on their own when you try to use an arm or leg. The sensation can be painful and has been described as a “wicked charley horse”. Because the muscle cannot move in its full range of motion, the tendons and soft tissue surrounding the muscle can tighten or become shorter. If not treated, spasticity can cause the muscle to “freeze” into an abnormal position, which can be very painful. In the arm, spasticity can cause a balled-up fist, a bent elbow, or an arm pressed to the chest. Spasticity in the leg can cause a pointed foot, a curling toe, or a stiff knee. Spasticity can have a profound effect on the quality of life, making it difficult to walk or do daily activities.

TREATMENT

Exercise and stretching are important treatments for spasticity. Therapists will work with you to increase your range of motion and help prevent permanent muscle shortening. You need to move the affected limb over and over again, either on your own or with the help of a therapist or a special machine. If the joints of your affected limb are not moved through their full range of motion, they can become stiff to the point that they can no longer be straightened.

Here are some tips to prevent stiff joints:

- Change your position every 1 to 2 hours during the day.
- Exercise all your joints at least twice each day.
- Position your affected arm or leg to keep its mobility, for example, put a rolled washcloth in your hand to prevent hand stiffness.
- Do not allow your affected arm or leg to be under your body when you are lying down.
- Do not allow your affected arm or leg to fall off the side of your bed or the wheelchair.
- In some cases electrical stimulation is used on muscles. Casts or splints may be used to hold muscles in their normal position. This helps to prevent the muscles from shortening so it can work normally.

Medications used for spasm:

- **Baclofen, dantrolene (Dantrium), and tizanidine (Zanaflex):** These are antispasmodics. These oral medications have been used for many years to treat spasticity from stroke. They relax tight muscles and stop muscle spasms, however, they cause sleepiness and weakness and in some cases can cause hallucinations and sleep problems.
- **Botulinum toxin or phenol injections:** These are injected directly into the spastic muscle to block messages that cause the muscle to make contact to the nerve.
- **Intrathecal baclofen:** Intrathecal baclofen is used differently than the oral form of baclofen. It is delivered directly to the spinal cord through a small tube. The tube is implanted into the spinal cord by a surgeon, who also implants a small pump under the skin of the person’s abdomen to deliver the medicine. The medicine is specially targeted so the problems with sleepiness are avoided. This therapy is used for people who have severe spasticity.

Surgical option:

- Some people may need surgery to treat spasticity. For example, surgery may be needed to lengthen or release muscles that are too tight in the arm or leg. Surgery may also be able to help someone regain movement in muscles that are weak or paralyzed.

Sleep

INSOMNIA

Insomnia means that you have trouble falling asleep or staying asleep. It is a common problem. Most people will have sleep problems now and then because of temporary stress, worry, or an irregular schedule, but when you have trouble sleeping for weeks or months, it can lead to health problems. Worrying about it only makes it worse.

The good news is that if you can change the way you think about sleep, and then make some simple lifestyle and habit changes, you may improve how well you sleep. Lots of things affect how well you sleep.

GET PLENTY OF REST

Here are some tips that may help you sleep more soundly and wake up feeling more refreshed. You might want to start slowly at first, pick 1 thing to change, and see how that change affects your sleep. After a week or 2, try to add another change. As you make changes, you might want to use a sleep journal to figure out what things help you to sleep better, and what things may get in the way of a good nights sleep. Step by step, your sleep should improve. If it doesn't, talk to your doctor.

If you have trouble sleeping, try these tips:

- Try to go to bed and wake up at the same time every day, including weekends, even if you haven't slept well.
- If you can't sleep, talk to your doctor about medicines to help you sleep while you are first going through withdrawal.
- Before going to bed, try to not use technology such as smartphones, computers, or tablet devices. The light from these devices and the emotions that can result from checking email or social media sites can make it harder to unwind and fall asleep.
- Get regular exercise.
- Get plenty of sunlight in the outdoors, especially in the morning and late afternoon.
- Set aside time for problem solving earlier in the day so that you don't carry anxious thoughts to bed. Keep a notepad by your bed to write down any thoughts or worries that may keep you up or wake you up during the night.
- Do something relaxing before bedtime. Try deep breathing, yoga, meditation, tai chi, or muscle relaxation. Take a warm bath, a relaxing walk, play a quiet game, or read a book.

Things to avoid:

- Don't take naps during the day unless you are sure they don't keep you awake at night.
- Don't use tobacco, especially near bedtime and/or if you wake up during the night. Nicotine is a stimulant which can keep you awake.
- Don't lie in bed awake for too long. If you can't fall asleep, or if you wake up in the middle of the night and can't get back to sleep within 15 minutes or so, get out of bed and go to another room until you feel sleepy.

Sleep (Cont.)

IN BED

- Use a pillow and mattress that are comfortable for you.
- Be sure your bed is big enough to stretch out comfortably, especially if you have a sleep partner.
- Use earplugs or sleep in a different room if your partner's snoring keeps you awake. If you notice that your partner is sleeping on his or her back, turn your partner to his or her side. This may help them stop snoring. You may also want to encourage your partner to see a doctor to find out what may be causing him or her to snore.
- Reserve the bed for sleep and sex. A bit of light reading may help you fall asleep, but if it doesn't, do your reading elsewhere in the house. Don't watch TV in bed.
- Consider making your bed off-limits to your children and pets. Their sleep patterns may be different from your own and may affect your sleep.
- Reduce the noise in the house, or mask it with a steady low noise, such as a fan on slow speed or a radio tuned to static. Use comfortable earplugs if you need them.
- Keep the room cool and dark. If you can't darken the room, use a sleep mask.
- If watching the clock makes you anxious about sleep, turn the clock so you can't see it, or put it in a drawer.

FOOD AND DRINK

- Limit caffeine (coffee, tea, caffeinated sodas) during the day, and don't have any for at least 4 to 6 hours before bedtime.
- Don't drink alcohol late in the evening. You may fall asleep with no problems, but drinking alcohol before bed can wake you up later in the night. Otherwise, drink in moderation. Try to limit alcohol to 2 standard drinks a day for men and 1 drink a day for women.
- Don't go to bed thirsty, but don't drink so much that you have to get up often to urinate during the night.
- Avoid heavy meals close to bedtime, but a light snack may help you sleep.

Dressing Tips

A stroke often affects movement and the use of one side of the body, so getting dressed is often difficult for people after a stroke.

GETTING DRESSED

Getting dressed may be easier if you use stocking/sock aids, rings or strings attached to zipper pulls, and button hooks. Talk with a nurse or physical therapist about assistive devices that may help you get dressed.

Clothing may be easier to put on if it has features such as:

- Velcro closures
- Elastic waistbands and shoelaces
- Snaps and grippers

To make getting dressed easier:

- Lay out your clothes in the order that you will put them on, with those you will put on first on top of the pile.
- Sit down while you dress.
- Put your affected arm or leg into the piece of clothing first, before the unaffected arm or leg.

REMOVING CLOTHING

Removing clothing that has to go over your head may be difficult. To undress after a stroke has affected an arm or leg, remove the stronger arm or leg from the clothing first, then slip out your affected arm or leg.



Intimacy

After stroke recovery, you may have problems that prevent intimacy. Fear, anger, and other issues may affect your desire for intimacy and sex. It is safe to renew your sexual relationship when you and your partner are ready. Take a comfortable pace that is comfortable for you and your partner. It is very important to communicate, listen, and talk to each other. It is perfectly normal to discuss issues with your healthcare team about sex and issues that may be effecting you such as erectile dysfunction.

REBUILDING INTIMACY

Stress and worry of your health issues can upset the closeness in an intimate relationship. It may cause sexual problems that were not there before. Being honest with your partner is the best step toward rebuilding intimacy. Even if it is difficult to talk about your feelings, not talking to your partner may make it worse, and will cause more problems.

KEYS TO TALKING ABOUT INTIMACY

- Choose a time when you are both relaxed.
- Be patient and don't criticize, be supportive of each other.
- Try to understand and acknowledge each other's concerns.
- Do not interrupt your partner. Wait until your partner is done talking before speaking.
- Choose a time and place where you feel comfortable and will not be interrupted.

RESUMING SEXUAL INTIMACY

You do not have to start with sex. Do not push yourself or your partner. You may want to start with hugging, kissing, and touching first, which may help with feeling close again. When you are ready for sex, focus on pleasing each other.

Stroke and Employment

More than a quarter of all strokes affect people younger than 65 years old. More than half of these people were in the workforce when they had a stroke. In some cases, the goal is to return to work. If you are returning to a full or part time job, work with your healthcare team and your employer to overcome any obstacles to working. Your doctor will likely have to approve any return to work.

RETURNING TO WORK

Ask yourself these questions:

- Will you be able to go back to your same employer? Are you able to do the same job? Will you have the same responsibilities?
- Is it time to try something new? What do you want to do? Where do you want to work?
- How much do you want to work? Do you want to work full or part time?
- What do you think about volunteering? Is this an option to ease back into a daily routine while you gain new skills?

BARRIERS TO RETURNING TO WORK

If your stroke takes you out of the workforce talk to your social worker for advice. If your level of function has changed due to your stroke, you may think about different options.

Your ability to work depends on:

- The area of your brain that was affected
- The severity of your stroke
- Your physical and cognitive abilities
- How well you have recovered
- Your ability to get to and from your place of employment
- Whether you have the support you need to go back to work

DRIVING AFTER A STROKE

After a stroke, problems with your vision, speech, or ability to move can change your ability to drive safely, so you'll need to get approval to drive again. This may be hard to accept. You may feel that this is a big loss of independence, but this approval is for the safety of yourself and others.

Talk with your doctor and your loved one's about driving again. You will need your doctor's approval to drive again. Check with your motor vehicle department about the rules for people who have had a stroke. You may need to take classes, be tested again, and have changes made to your car. Some stroke rehab centers give driver training classes.

If you cannot drive because of problems from your stroke, check with your stroke rehab center about programs that offer special vans that can take you to and from places. Senior groups and volunteer agencies may also offer transportation services.

You can also work with an occupational therapist to assist with driving simulation.

Caring for Your Loved One

It is important to encourage your loved one to do as much for themselves as possible. He or she should keep practicing activities and exercises learned in rehab. They may also benefit from continued therapy as an outpatient and home health nursing care may be required. Talk with the care team about ways of meeting your loved one's needs.

KEEPING TRACK OF MEDICATIONS

After a stroke, there are likely going to be medications added to your loved one's medication list. Keeping track of medications can be difficult, so it is good to be organized. Keep a medication list. If the doctor is prescribing a medication that is already on the list, it may be a different dose, so make sure to look at that. The medication section of this book will help give you ideas to better organize medications. If there are any problems with the medications, let the doctor and team know right away.

REDUCING RISKS OF STROKE

After a stroke, the risk for another one is greater. The good news is that there are things you can do to decrease the risks including, healthy changes in diet, exercise, and daily habits. Making lifestyle changes is not easy. Encouragement and support can make a big difference in success rates for those changes. You as the caregiver can also benefit if you make the changes as well.

NUTRITION

Sometimes after a stroke, people may have little to no appetite. Some may struggle with the inability to feed themselves, or not enjoy food consistency. Be sure your loved one's nutritional issues are addressed. You can also help your loved one make better food choices and change unhealthy eating habits.

SMOKING CESSATION

Smokers have a much higher risk for having another stroke. Second hand smoke is almost as high in risk. If your loved one smokes, do whatever you can to assist with them quitting. If you smoke, now would be a great time to quit. Smoking or second hand smoke puts your health and the health of your loved one at a higher risk of having another stroke.

COPING

Seeing the effects that a stroke has on your loved one can be very upsetting. There may be changes in your relationship, and you both need to find ways to cope.

You can assist by:

- Ask your loved one's providers when you have questions or need support or guidance.
- Focus on what changes you can help your loved one make that can help prevent another stroke.
- Be encouraging and patient for the changes being made. Change is hard so be good to yourself and your loved one.

MOVING FORWARD

As your loved one moves back into activity, provide encouragement and support. They may need assistance to be active and even if they say they can exercise alone, it may be more fun if you or others join in. Try to incorporate exercise into your daily activities.

Caring for Your Loved One (Cont.)

MOOD SWINGS

Tips for dealing with emotional lability (rapid, often exaggerated changes in mood):

- Stay calm. Accept the behavior and go on with what you are doing.
- Remind the person that the behavior is a result of the stroke.
- Don't criticize the person's response.

MOOD CHANGES

It can be hard to cope with your loved one's changes in mood. If you understand what is going on, it may be easier to deal with. You may see signs of depression and if your loved one is depressed, talk to the doctor or another healthcare provider. Receiving treatment for depression can help with your loved one's recovery.

DEALING WITH COGNITIVE IMPAIRMENTS

Often with time and therapy, problems with cognitive skills can improve. Work with the rehab team to learn the best strategies for addressing specific problems. You can reinforce therapy by helping your loved one with the suggested exercises. Ask for tips for how to help when frustrations arise. In many cases, hard work and effort can pay off with noted improvements. Nobody can predict how much and how fast a person will recover.

TIPS FOR DYSARTHRIA AND DYSPRAXIA

With practice, people with dysarthria and dyspraxia often can improve their speech. When you talk to your loved one, do as you normally would, and wait for an answer.

Try to:

- Practice saying words and sounds with the person. Ask for word lists from the speech therapist.
- Encourage the person to take their time and make all the sounds that form each word.
- If you cannot understand the words the person speaks, ask them to repeat it, or say what they mean in a different way.

GET THE MOST OUT OF REHABILITATION

If your loved one goes to a rehabilitation center after their stroke, you have an opportunity to be more involved in their care. You will learn important transfer techniques that will keep you and your back safe, and what changes may need to be made in your home to make areas safer for your loved one. You will gain hands on experience that will make the discharge to home more successful. Ask a lot of questions and check in with the healthcare team to find out how you can be most helpful during early recovery.

WHEELCHAIR TRANSFERS

Patients who cannot walk will likely need to use a wheelchair to get around. The therapist will show you how to safely and correctly transfer the patient (move from sitting to wheelchair). Make sure you lock the wheelchair breaks, stand as close to your loved one as possible, and make sure your footing is stable. The patient should always wear a special belt for you to grip. As you assist, keep in mind that it is good for your loved one to do as much as possible independently.

Take Care of Yourself

Caring for someone after a stroke can be challenging and can take an emotional and physical toll on you. You may feel sad, angry, scared, or overwhelmed. Be sure to ask for help when needed. You must take care of yourself. Take time for yourself and make sure your needs are being met. You may find it hard, or you may feel guilty for caring for yourself, however, you are an important part in the stroke recovery process, so it is very important for you to be at your best!

Some of these suggestions may help:

- Remember that some things are out of your control. You cannot manage your family member's condition for them, but you can be supportive.
- Seek out support groups for caregivers.
- Set aside time to do "nothing". Just relax or take a nap.
- Be aware of how you react to stress and stressful situations. Stop for a moment before you react if you become upset. Take some deep breaths, count to 10, or go for a walk to calm down.
- When you need a break, ask for help. Do not feel guilty, everybody needs time to themselves.

MAKING TIME FOR YOU

You may feel overwhelmed tending to your loved one's needs. Keep in mind that if you burn out, you will not be helpful to anyone. You cannot take care of anyone if you are not taking good care of yourself. This is essential, not selfish. Get out and exercise, take breaks, and eat healthy. Remember, you cannot do everything yourself and it is okay to get help!

SAVE YOUR ENERGY

Sometimes the physical and mental extent of disability caused by a stroke may not be known for weeks. The lack of information may be frustrating. Work with what you can, and save your energy. Instead of getting frustrated about what you don't know, think of what you can do, and focus on moving ahead with that.

GET SUPPORT

Sometimes it is helpful to talk to others, a friend or family member. There are times however when talking to a professional such as a counselor, social worker, or a therapist, may be needed. Joining a local support group for caregivers is another good option. Support groups can help remind you that you are not alone! It may help to share thoughts, ideas, and things that have worked or not worked for you with other people who are going through the same situation as you.

SET PRIORITIES

Make a list of what you need to do today. Some days you may only get to one thing on the list, but writing down what needs to be done can get it off your mind. Only do what absolutely has to be done on the days you are feeling tired or overwhelmed. It is okay to ask for help, and look for ways to do tasks with less effort.

Take Care of Yourself (Cont.)

WATCH FOR DEPRESSION

Becoming a caregiver for a loved one can be stressful and tiring. You will be faced with new challenges that you were not necessarily ready for. If you have any symptoms of depression, talk to your doctor right away. You are not alone and you can get support and help.

Symptoms of depression can include:

- Withdrawing from loved ones and others
- Feeling sad, hopeless, or empty
- Losing interest in things that you enjoyed before
- Not wanting to participate in daily activities
- Feeling guilty, worthless, or inferior

ENJOY YOUR LIFE

It's okay to have fun! Make time weekly for at least one activity for yourself.

Here are some suggestions:

- Have coffee with a friend
- Go for a walk
- Go for a weekend getaway
- Spend time with family, grandkids, or friends
- Play cards
- Read a book

Resources

The following resources can help you learn more about strokes, stroke recovery, and how to live a healthier lifestyle. They can also help you find support groups in your area.

- **American Stroke Association:** stroke.org / 888-478-7653
- **American Heart Association:** heart.org / 800-242-8721
- **National Heart, Lung, and Blood Institute (NHLBI):** nhlbi.nih.gov / 301-592-8573
- **WomenHeart - The National Coalition for Women with Heart Disease:** womenheart.org / 202-728-7199
- **MyPlate:** choosemyplate.gov
- **Family Caregiver Alliance:** caregiver.org / 800-445-8106
- **National Library of Medicine:** medlineplus.gov/languages/stroke.html
- **UW Medicine Stroke Center at Harborview:** uwmedicine.org/stroke

MORE QUESTIONS? REQUEST A PERSONAL CALL FROM THE STROKE PROGRAM COORDINATOR AT CONFLUENCE HEALTH AT 509-668-6166

EMERGENCY ACTION PLAN

Keep a list of:

- Emergency phone numbers including 911, family members, and healthcare provider's numbers
- Health conditions
- Medicines with proper dosages
- Allergies



Keep copies of these lists by the phone and in your wallet or purse, and always carry a copy of medical appointments.

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