My Stroke Education Guide

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Introduction

At Bronson, we want you and your loved ones to know that you have come to the right place for stroke care. When you or your loved one hears the word stroke, you may feel nervous and afraid. We want you to know that you are in the best place for recovery. No matter which Bronson hospital you choose, you can be assured that stroke care is the same across our system.

Bronson Methodist Hospital is recognized by The Joint Commission as a comprehensive stroke center. It is one of only 100 in the nation as of 2016. Our highly trained, diverse team of specialists is one of the reasons for quality outcomes. Your stroke team may include the following people depending on your needs:

- You and your family
- Neurologists
- Vascular neurologists
- Nurse navigator
- Neurosurgeons
- Nurse practitioners
- Stroke nurses
- Speech-language pathologists
- Physical therapists
- Dietitians
- Case managers
- Chaplains
- Physician assistants
- Endovascular neurosurgeons
- Physical medicine/rehab physicians
- Medical social workers
- Respiratory therapists
- Pharmacists
- Occupational therapists

Recovery is a journey. Use this book as a guide to recovery and a tool to prevent a future stroke. We are eager to partner with you on your journey. Thank you for choosing Bronson.
As you review this book, consider some questions that may help you and your family better understand your stroke and the recovery process:

What is a stroke and what type of stroke did I have? (see page 9)
- ☐ Ischemic or clot stroke
- ☐ Hemorrhagic or bleeding stroke

What are the warning signs of a stroke and what do I do if they happen? (see page 7)

What are my personal risk factors for stroke? (see page 15)
- ☐ High blood pressure
- ☐ High cholesterol
- ☐ Diabetes
- ☐ AFib (irregular heartbeat)
- ☐ Smoking or tobacco use
- ☐ Alcohol use
- ☐ Overweight
- ☐ Inactivity
- ☐ Age
- ☐ Family history of stroke
- ☐ Personal history of stroke or TIA
- ☐ Race (African American)
- ☐ Gender (male)

What medicines do I take that decrease my risk for stroke? ____________________________
________________________________________________________________________________

What questions do I have for my doctors or nurses about my stroke diagnosis, testing, or recovery? _________________________________________________________________________________________
_______________________________________________________________________________________

My goals for my recovery are: __________________________________________________________
_______________________________________________________________________________________

Will I need rehabilitation therapies after I leave the hospital?
_______________________________________________________________________________________

If you have questions along the way, ask any member of your stroke team.
Warning Signs of Stroke

Recognizing a stroke is the first critical step in getting the treatment you need. Each minute a stroke goes untreated two million brain cells die. This increases the risk of permanent brain damage, disability, and death. The American Stroke Association recommends remembering the acronym “FAST” to recognize and respond to stroke. Acting “FAST” saves lives and improves recovery.

- **F= Face:** Ask the person to smile. Does one side of the face droop?
- **A= Arm:** Ask the person to raise both arms. Does one drift downward?
- **S= Speech:** Ask the person to repeat a simple phrase. Does the speech sound slurred or strange?
- **T= Time:** If you observe any of these signs, even if they resolve, it’s time to call 911

**BEYOND F.A.S.T. – OTHER SYMPTOMS YOU NEED TO KNOW**

- Sudden numbness, tingling, or weakness on one side of the body
- Sudden confusion or trouble understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden severe headache with no known cause often described as the “worst headache of my life”

**What do you do if you think you or someone else is having a stroke?**

Immediately call 9-1-1 so an ambulance can be sent. Calling 9-1-1 is the fastest way to get lifesaving care. A stroke is an emergency and needs treatment right away. Emergency medical services (EMS) staff can begin treatment when they arrive. When taken by ambulance the EMS staff will alert the hospital you are coming. Then the stroke team will be ready to care for you when you arrive. The stroke team will ask when the last time you or someone else saw you without symptoms. This is known as the “last known well” time. This will help the stroke team decide which treatments are best.
What is a Stroke?

A stroke happens when blood flow to the brain stops. There are two types of stroke: ischemic and hemorrhagic.

- **Ischemic stroke** is caused when plaque or a clot blocks a blood vessel in your brain or neck.
- **Hemorrhagic stroke** is caused when a vessel in your brain breaks causing bleeding in the brain.

**Ischemic strokes** are the most common type of stroke. They are caused by a blood clot that travels through the bloodstream to the brain. They can also be caused by the build-up of plaque in the arteries of the brain. When the artery is blocked, oxygen rich blood can no longer reach the brain tissue, and it begins to die.

**TIA (Transient Ischemic Attack):** A TIA happens when there is a brief blockage of blood flow to the brain. Your symptoms may go away, but you should see a doctor right away. TIA is a warning that a stroke may be coming. Your stroke risk increases once you have had a TIA. Medical attention can help to treat your risk factors and help to prevent a stroke.
A hemorrhagic stroke is when a weakened blood vessel bursts or leaks blood into the brain. There are two types of hemorrhagic stroke:

- Intracerebral hemorrhage (ICH) is when the blood is in the brain’s tissue.
- Subarachnoid hemorrhage (SAH) is when the blood is around the brain’s surface.

**Intracerebral hemorrhage** is the most common type of hemorrhagic stroke. This type of stroke happens when a weakened spot on a blood vessel breaks and leaks blood into the surrounding brain tissue. Blood can no longer move through the vessel to supply the brain with oxygen rich blood and the brain tissue begins to die. The most common cause of this type of stroke is high blood pressure.

**Subarachnoid hemorrhage** is typically caused by a burst aneurysm on the surface of the brain. As an aneurysm grows, the blood vessel wall becomes thinner and weaker, increasing its risk of bursting. If the aneurysm bursts, blood builds up over the surface of the brain and begins to push on the brain tissue. Treatment may include clipping or coiling of the aneurysm. Clipping involves putting a clip on the outside of the vessel to seal off blood flow. Coiling involves going in through the inside of the vessel with a small catheter and placing small coils inside of the aneurysm. This will close it off and stop the bleeding.
How Does Your Brain Control Your Body?

Your brain controls many of the functions of your body. The brain is divided into different areas (or lobes) that control how the body moves and feels. The picture shows the four lobes of the brain that may be affected by a stroke.

Symptoms you may have after a stroke are linked to the area of the brain where the stroke occurred. The **frontal lobe** controls behavior, personality, and voluntary movement or activity. The **parietal lobe** is responsible for your temperature, taste, touch and movement. The **temporal lobe** helps you with hearing and understanding speech. The **occipital lobe** is mainly responsible for vision.
The left side of the brain controls the movement and feeling of the right side of your body. Survivors of left-sided strokes may have weakness or paralysis of the right side of the body. They may have trouble with talking or understanding written or spoken words. This is called aphasia. Survivors may also have a hard time remembering new information.

The right side of the brain is responsible for movement and sensation on the left side of the body. A right-sided stroke might cause weakness or paralysis on the left side of the body. Survivors of right-sided strokes may have problems judging distances and space, making them more likely to fall or bump into objects.

There are many general symptoms that a stroke survivor may experience. Sometimes survivors will have problems with judgment and impulsiveness. They may not realize that they can no longer safely complete tasks as they did before the stroke. Survivors may forget about the affected side of their body. For example, a stroke survivor with paralysis on one side of the body may believe he or she can get up and walk. This could lead to a fall.
Risk Factors for Stroke
What Are Stroke Risk Factors for You and Your Family?

You now know the symptoms of stroke and what to do if you see the symptoms of stroke. You may now consider how you can prevent having one. There are ways you can control your risk for having a stroke. Healthy lifestyle choices and taking prescribed medicine will help to reduce your risk. Take a minute to assess your risk of stroke with the National Stroke Associations Stroke Risk Assessment Tool.

<table>
<thead>
<tr>
<th>RISK FACTOR</th>
<th>HIGH RISK</th>
<th>CAUTION</th>
<th>LOW RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Pressure</td>
<td>□ &gt;140/90 or unknown</td>
<td>□ 120-139/80-89</td>
<td>□ &lt;120/80</td>
</tr>
<tr>
<td>Atrial Fibrillation</td>
<td>□ Irregular heartbeat</td>
<td>□ I don’t know</td>
<td>□ Regular heartbeat</td>
</tr>
<tr>
<td>Smoking</td>
<td>□ Smoker</td>
<td>□ Trying to quit</td>
<td>□ Nonsmoker</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>□ &gt;240 or unknown</td>
<td>□ 200-239</td>
<td>□ &lt;200</td>
</tr>
<tr>
<td>Diabetes</td>
<td>□ Yes</td>
<td>□ Borderline</td>
<td>□ No</td>
</tr>
<tr>
<td>Physical Activity</td>
<td>□ None</td>
<td>□ 1-2 times a week</td>
<td>□ 3-4 times a week</td>
</tr>
<tr>
<td>Weight</td>
<td>□ Overweight</td>
<td>□ Slightly overweight</td>
<td>□ Healthy weight</td>
</tr>
<tr>
<td>Stroke in Family</td>
<td>□ Yes</td>
<td>□ Not sure</td>
<td>□ No</td>
</tr>
<tr>
<td>TOTAL SCORE</td>
<td>□ High Risk</td>
<td>□ Caution</td>
<td>□ Low Risk</td>
</tr>
</tbody>
</table>

Each box above is worth one point. Add your score in each column to assess your risk.

- If your high-risk score (red boxes) is 3 or more, ask your doctor about stroke prevention right away.
- If your caution score (yellow boxes) is 4-6 you have several risks that will place you at a higher risk for stroke. Take control and reduce your risk.
- If your low risk score (green boxes) is 6-8, you’re doing well keeping your stroke risk low.

Reducing your risk:
1. Know your **blood pressure**. If it is high, work with your doctor to lower it.
2. Find out from your doctor if you have **A Fib** (irregular heartbeat).
3. If you **smoke**, quit.
4. If you drink **alcohol**, no more than two drinks per day.
5. Find out if you have **high cholesterol**. If so, work with your doctor to control it.
6. If you have **diabetes**, follow your doctor’s advice carefully to control your diabetes.
7. Include **physical activity** in your daily routine.
8. Choose **lower salt and lower fat** foods.
9. Ask your doctor for other ways to **lower your risk for stroke**.
Controllable Risk Factors

About 80 percent of strokes can be prevented. Learning how to control your risk factors is one of the best ways you can prevent a stroke. There are risk factors that you can control and risk factors that you cannot control. By controlling the risk factors you can, you may greatly reduce your stroke risk. Each year, about 795,000 people in the United States suffer a stroke. Many of the conditions that place you at higher risk for stroke can be managed with the help of your healthcare team.

Controllable risk factors include:
- Blood pressure levels
- AFib
- Cholesterol levels
- Diabetes

There are also lifestyle choices that can put us at higher risk for stroke. These include:
- Tobacco use or smoking
- Alcohol use
- Obesity

The following pages can help you learn how to manage your stroke risk. Let your healthcare providers know if you have any questions or need more information on any of these topics.

**High Blood Pressure**

Also known as hypertension, high blood pressure is the number one cause of stroke. Many people who have high blood pressure do not realize it. Have your blood pressure checked at least once a year to be sure it is at a safe level.

**What do the blood pressure numbers mean?**

Two numbers are used to define blood pressure. The top number is called the systolic blood pressure. This is the pressure in the arteries when the heart squeezes blood out of the heart (contracts). The bottom number is called the diastolic blood pressure. This is the pressure in the arteries when the heart relaxes.

My blood pressure is: __________________________

My blood pressure goal is: __________________________

There is a blood pressure tracking sheet available to use on page 55 of this book.
What is the American Heart Association recommendation for a healthy blood pressure?
This chart shows the American Heart Association blood pressure categories. Keeping your blood pressure at a normal level can help to reduce your risk of stroke.

<table>
<thead>
<tr>
<th>Blood Pressure Category</th>
<th>Systolic mm Hg (upper #)</th>
<th>Diastolic mm Hg (lower #)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>less than 120 and</td>
<td>less than 80</td>
</tr>
<tr>
<td>Prehypertension</td>
<td>120 – 139 or</td>
<td>80 – 89</td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>140 – 159 or</td>
<td>90 – 99</td>
</tr>
<tr>
<td>(Hypertension) Stage 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>160 or higher or</td>
<td>100 or higher</td>
</tr>
<tr>
<td>(Hypertension) Stage 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypertensive Crisis</td>
<td>Higher than 180 or</td>
<td>Higher than 110</td>
</tr>
<tr>
<td>(Emergency care needed)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Your doctor should evaluate low blood pressure readings.

If you have high blood pressure, what can you do to control it?
There are 8 main ways to control your blood pressure. They include:

- Eating healthier foods like fresh fruits and vegetables. Keeping salt intake to less than 1500 mg a day may be helpful.
- Enjoying regular physical activity.
- Staying at a healthy weight.
- Managing stress.
- Avoiding tobacco smoke.
- Taking medicines as directed.
- Limiting alcohol, if you drink.

Find more information on how to make healthy lifestyle changes to manage your blood pressure and reduce your risk of stroke in “Healthy Lifestyle Changes” starting on page 22.
AFib (AFib)
AFib is an irregular heartbeat that can lead to blood clot formation, stroke, heart failure and other heart-related complications. An estimated 2.7 million Americans are living with AFib. Sometimes people with AFib do not have symptoms. Others may have common symptoms which include:

- Rapid and irregular heartbeat
- Fluttering in the chest
- Dizziness
- Shortness of breath and anxiety
- Weakness
- Faintness or confusion
- Fatigue when exercising
- Sweating
- Chest pain or pressure (Call 9-1-1 if you have chest pain or pressure)

If you have AFib, work with your healthcare provider to find a treatment plan that is right for you. Follow your treatment plan as closely as you can. To learn more on AFib, visit the American Heart Association website at www.heart.org/AFib.

High Cholesterol
Cholesterol is a fat-like substance in blood that may lead to narrowing and clogging of your blood vessels. A cholesterol level is considered high when it is over 200. Eating foods lower in fat may help lower your cholesterol level. Regular exercise, at least 30 minutes a day for at least 5 days a week, will strengthen your heart and lungs. This will also reduce your risk of cholesterol build-up in your arteries. Medicine may be needed to control your cholesterol levels. Follow your doctor’s advice for cholesterol control.

To help lower your cholesterol levels:

- Limit saturated fats to less than 10 to 13 grams per day. Limit cholesterol intake to less than 200 mg per day.
  - Choose lean meats such as chicken, turkey and lean ground beef. Limit marbled beef and pork intake.
  - Avoid high fat meats such as bacon and sausage.
- Use low-fat or fat-free milk, cheese and yogurt.
- Use soft margarines in place of stick margarine, butter or shortening.
- Bake, boil, broil or sauté using a non-stick pan. Do not fry foods.
  - Limit trans fats to less than 2 gm per day.
    - Read the food labels and check for trans fats.
    - Trans fats can be found in food like frozen pizza, microwave popcor
      nes, stick margarine and packaged cookies.
  - Eat foods with heart healthy fats.
    - Eat salmon, tuna or mackerel twice a week.
    - Walnuts and almonds are a good source of heart healthy fats.
    - Use canola or olive oils instead of butter or animal fat.
  - Eat foods that are high in fiber. Your goal for fiber intake is 20 to 30 gra
    ms per day.
    - Foods high in fiber include:
      - Fresh fruits and vegetables, five servings every day.
      - Foods made from whole grains, three servings every day.
      - Dried beans and lentils.

My cholesterol levels are: Total _____ LDL _____ HDL _____ Triglycerides ______
Diabetes
Diabetes may increase your risk for stroke. Over time, increased blood sugar levels can lead to increased fatty deposits or clots on the insides of the blood vessel walls. These clots can narrow or block the blood vessels in the brain or neck, cutting off the blood supply. This stops oxygen from getting to the brain, causing a stroke.

Symptoms of diabetes include:
- Increased thirst
- Increased appetite
- Fatigue
- Increased urination
- Weight loss
- Blurred vision
- Sores that do not heal
- Fruity odor or breath

You can help control diabetes. One way is to limit simple carbohydrates (carbs) in your diet. Simple carbs are found in foods like table sugar, cake, soda, candy and jellies. Eating these foods cause an increase in blood sugar levels. Your dietitian can help you manage what you eat to control your diabetes. One way to help may include keeping a food diary to track what you eat, when you eat, and how it affects your glucose levels. Check your blood sugar two hours after eating to see how your body reacts to various foods.

Follow the advice of your healthcare team, and see more ideas for a healthy lifestyle starting on page 22 of this book. For more information on healthy eating see page 24 of this book.
Common Medicines

Knowing what stroke is and what your risk factors are is the first step in decreasing your risk for stroke. Sometimes medicines are needed to help control your risk factors. Work with your doctor to see what medicines are best for you. It’s important that you take your medicines every day as prescribed, even if you feel fine. Talk to your doctor before stopping or changing any of your medicines.

**Antihypertensive blood pressure medicines** are used to lower your blood pressure when diet and exercise are not enough. There are more than 50 types of these medicines. Each medicine works differently to lower blood pressure. Talk with your doctor about which medicine is best for you. Some things to consider in choosing the right medicine for you are cost, convenience, side effects, and how they work with your other medicines.

My blood pressure medicine is: __________________________________________

**Cholesterol-reducing medicines** help to lower the amount of cholesterol in your blood stream. This will help to prevent a stroke.

My cholesterol medicine is: __________________________________________

**Blood clot prevention medicines** help to prevent a stroke by stopping blood clots from forming in the blood stream. There are two types of this medicine. They are called anticoagulants and antiplatelets.

My blood clot prevention medicine is: ________________________________
Healthy Lifestyle Changes

**Smoking**

Smoking and second hand smoke has many negative effects on your health. These effects include:

- Lowering HDL levels (good cholesterol)
- Temporarily raising blood pressure
- Increasing the chance of blood clotting
- Making exercise more difficult

Smoking doubles your risk of stroke. The day you stop smoking, your risk of stroke also drops. After 5-15 years of being smoke free, your risk is the same as a person who never smoked.

**Getting ready to quit smoking**

You are more likely to quit smoking if you prepare for two things:

1. your last cigarette
2. cravings, urges and feelings that come after quitting

Look at quitting as a 5 step process:

1. Set a quit date and get support from your family and friends
2. Choose a method for quitting
   a. “Cold turkey”: stop on your quit day.
   b. Reduce the number of cigarettes you smoke each day until you reach 0.
   c. Smoke only part of each cigarette and decrease the amount every two to three days.
3. Decide if you need medicine to help you quit.
   a. If you smoke more than 25 cigarettes a day and smoke within 30 minutes of waking, you may be addicted to nicotine.
   b. Medication may help you quit smoking for good.
4. Plan for your quit day
   a. Have low fat foods available to eat (e.g.: fruits, veggies, chewing gum)
   b. Remove every cigarette, match, lighter, and ashtray from your house, office and car.
5. Stop smoking on your quit day. Celebrate each successful day with something you enjoy.
Resources:

For more information on quitting smoking, call Bronson HealthAnswers at (269) 341-7723. Other resources that may help you are:

- American Cancer Society
  1-800-227-2345 (www.cancer.org)
- American Heart Association
  1-800-242-8721 (www.heart.org)
- American Lung Association
  1-800-586-4872 (www.lung.org)
- Centers for Disease Control and Prevention 1-800-232-4636 (www.cdc.gov/tobacco)
- www.Michigan.gov/tobacco
- quitnet.meyouhealth.com

Alcohol

Drinking alcohol has many negative effects on your health that may increase your risk for stroke. These effects include:

- Temporarily raising blood pressure
- Raising blood sugar levels
- Difficulty maintaining a healthy weight
- Increased risk for irregular heart rhythms
- Interacts with medicines such as blood thinners

According to the National Stroke Association limit alcohol intake to no more than two drinks a day for men and one drink a day for women.

One drink is equal to

- 12 ounces of beer
- 5 ounces of wine (1 glass)
- 1 ¼ to 1 ½ ounces of liquor

After a stroke it is important to discuss your alcohol use with your doctor. Do not drink alcohol until cleared by your doctor.

Resources:

- National Institute on Alcohol Abuse and Alcoholism
  www.rethinkingdrinking.niaaa.nih.gov
- AA of Kalamazoo Hotline (www.AAKalamazoo.org) 269-349-4410
- For a full list of resources and additional information on treatment programs please ask your nurse or social worker.
Healthy Eating Lifestyle

These guidelines can help improve your health for life:

| Saturated Fat Intake                          | • Limit to less than 5 to 6 percent of the day’s total calories.  
|                                               | • About 11 to 13 grams or less daily |
| Trans Fat Intake                              | • Limit to less than 1 percent of the day’s total calories.  
|                                               | • Less than 2 grams daily |
| Omega-3 Fat Intake (heart healthy fat)        | • Try to eat more.  
|                                               | • Good sources include: fish, walnuts, canola and soybean oil, and flaxseed. |
| Sodium Intake                                 | • Limit to 2000 milligrams daily. |
| Fiber Intake                                  | • Increase to 25 to 35 grams daily. |

- Try to eat more plant-based meals, using beans and soy foods for protein.
- Limit alcohol intake. Talk to your doctor.
- Talk with your dietitian or doctor about healthy weight goals.

Suggested Foods for a Healthy Diet

| Dairy (eat 2 to 3 servings daily)            | • Skim, ½ %, or 1 % milk  
|                                               | • Natural and hard cheeses that are “reduced fat”, “low fat”, or “part skim.” Make sure to check sodium content on nutrition facts label.  
|                                               | • Low-fat or Non-fat yogurt |
| Meats, poultry, fish, beans, eggs, and nuts (eat 5 to 6 ounces daily) | • Choose lean, fresh or plain frozen meats, poultry, fish, and shellfish.  
|                                               | • Trim all visible fat from meat and poultry.  
|                                               | • Unsalted nuts (One-third cup is equal to 1 ounce of meat)  
|                                               | • Use low-sodium, natural nut butters.  
|                                               | • Bake, grill, or roast meat, poultry and fish without added fat. |
| Fruits and Vegetables (eat 3 to 5 servings of each, daily) | • Fresh, plain frozen, or canned fruits  
|                                               | • Fresh, plain frozen, or no salt added canned vegetables |
| Grains (eat 6 to 11 servings daily)           | • Choose whole-grain breads, pasta, rice, and cereals.  
|                                               | • Limit products that contain seasoning packets, such as: Rice-a-Roni™, macaroni and cheese and ramen noodles. |
| Soups               | - Use low sodium or no salt added soups, broths, or bouillon cubes.  
|                    | - Try homemade soups made with low sodium ingredients.          |
| Fats and Oils      | - Choose heart healthy oils, such as: canola, olive, peanut, and avocado oils.  
|                    | - Use liquid margarine, vegetable sprays or tub margarine, in place of butter or stick margarine.  
|                    | - Read the label of low-fat or non-fat salad dressings to control sodium intake. |
| Condiments         | - Choose seasonings without salt, such as: fresh herbs, garlic and onion powder, Mrs. Dash ®  
|                    | - Avoid any type of salt, MSG, and meat tenderizer.             
|                    | - Limit relish, pickles, and olives and sauces such as ketchup, mustard, barbeque, and steak sauce. |
Reading Food Labels
The “Nutrition Facts” on the label lists the amount of nutrients in each serving. Understanding food labels can help you make wise choices.

<table>
<thead>
<tr>
<th>Nutrition Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serving Size: ¾ oz. (21 g)</td>
</tr>
<tr>
<td>Servings Per Container: Approx 10</td>
</tr>
<tr>
<td><strong>Amount per Serving</strong></td>
</tr>
<tr>
<td>Calories 80</td>
</tr>
<tr>
<td><strong>% Daily Value</strong>*</td>
</tr>
<tr>
<td>Total Fat 6 g</td>
</tr>
<tr>
<td>Saturated Fat 4 g</td>
</tr>
<tr>
<td>Trans Fat 0 g</td>
</tr>
<tr>
<td>Cholesterol 20 mg</td>
</tr>
<tr>
<td>Sodium 45 mg</td>
</tr>
<tr>
<td>Total Carbohydrate 0 g</td>
</tr>
<tr>
<td>Dietary Fiber 0 g</td>
</tr>
<tr>
<td>Sugars 0 g</td>
</tr>
<tr>
<td>Protein 6 g</td>
</tr>
<tr>
<td>Vitamin A 4%</td>
</tr>
<tr>
<td>Calcium 20%</td>
</tr>
<tr>
<td>*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on you calorie needs.</td>
</tr>
</tbody>
</table>

Enjoy regular physical activity

Notes:
**Dining Out Guidelines for a Heart Healthy Lifestyle:**

When eating out, you can still follow heart healthy guidelines by being aware of the foods you order.

**Tips When Ordering:**

| Fast Food Restaurants | • Try to select salads with the dressing on the side.  
| • Order grilled skinless chicken sandwiches.  
| • Order single-sized hamburgers.  
| • Put sauces on the side.  
| • Ask for no salt added to your food.  
| • Ask if natural Swiss or mozzarella cheese is available. |

| Preferred Cooking Methods | • Select foods that have been steamed, broiled, roasted, or poached. |

| Ordering Ideas | • Limit addition of added fat to your bread  
| • Try to limit sweet rolls, pastries, and high-fat breakfast goodies.  
| • Order a salad or baked potato instead of chips, fries, coleslaw, or other high-fat or high sodium foods.  
| • Order thin crust pizza with fresh vegetables and ask to go easy on the sauce and cheese.  
| • Have sauces and salad dressings served on the side.  
| • Ask for food prepared without salt.  
| • Limit ordering butter, cream, or cheese sauces.  
| • Control portions by ordering appetizer-size serving or half portion, or share a dish with a friend. |

| Breakfast Ideas | • Order dry whole grain bread, bagel, or English muffin with peanut butter, jelly or honey.  
| • Whole grain cereal or hot cereal with skim or low fat (1/2% or 1%) milk  
| • Omelet made with fresh vegetables and natural hard cheeses  
| • Low-fat or non-fat yogurt with fresh fruit |

| Beverages | • Water with lemon or flavored non-calorie sparkling water  
| • Skim or low-fat milk (1/2% or 1%)  
| • Low sodium tomato juice |

| Appetizer Ideas | • Shrimp cocktail (Limit cocktail sauce due to sodium content.)  
| • Salad with lemon juice, oil with vinegar, or just vinegar  
| • Grilled vegetables  
| • Raw vegetables with low-fat yogurt |
| Entrees                                                                 | · Order meat, fish, or poultry that is broiled, steamed, or poached without added salt.  
|                                                                      | · Order vegetarian dishes with whole grains and non-cream sauces.  
| Salads/Salad Bars                                                   | · Select fresh vegetables to put on spinach and fresh greens.  
|                                                                      | · Add beans and chickpeas for added protein.  
|                                                                      | · Avoid non-vegetable choices like: deli meats, bacon, croutons.  
|                                                                      | · Use vinegar or oil and vinegar for salad dressing.  
| Desserts                                                             | · Fresh fruit  
|                                                                      | · Low-fat or non-fat frozen yogurt  
|                                                                      | · Sherbet or fruit sorbet  
|                                                                      | · Angel food cake, JELL-O™, low-fat or non-fat pudding  
| Condiments                                                          | · Limit use of ketchup, mustard, and relish.  
|                                                                      | · Avoid olives and pickles that may be added to some foods.  

After a stroke, some patients have difficulty swallowing. If you do, check with your doctor to see if you need a special eating plan that changes the texture of foods. Following this plan will prevent food from getting into your windpipe.
Enjoy regular physical activity

A key to getting your daily activity in is to make it something you enjoy doing. If you love the outdoors, enjoy a walk or hike. If you prefer to be inside and love music, enjoy some tunes while you walk the treadmill. The important thing is to get moving with something you enjoy. Remember to mix up your activity routine to keep you motivated. Have a workout buddy to help keep you on track. Reward yourself for doing the work to achieve your goals. For information on activity please go to: www.heart.org.

Manage stress

How much stress do you live with and what is the cost to your health? Stress has an impact on your body. Your body reacts to stress by releasing stress hormones in the blood. These stress hormones increase your heart rate and constrict your blood vessels, which increases your blood pressure. The increased blood pressure is only temporary and returns to pre-stress levels when the stress is removed.

What can I do to reduce my stress? You can reduce your stress by:

- Enjoying regular physical activity.
- Giving yourself enough time to get things done.
- Managing your to do list so that it is reasonable.
- Not sweating the small stuff.
- Meditating
Uncontrollable Risk Factors

These include things that we cannot control or manage. Although we cannot change these things about ourselves, it is important to know what they are so we can better understand our stroke risk.

- **Age:** A stroke can happen to anyone, but risk increases with age.

- **Gender:**
  - Women suffer more strokes per year than men. This is mainly because women live longer and stroke occurs more frequently in the elderly.
  - Men are more likely to have a stroke at a younger age than women.

- **Race:** African Americans have a higher stroke risk than other racial groups partially because they are more susceptible to high blood pressure and diabetes.

- **Family history:** Stroke or transient ischemic attack (TIA) can be an inherited risk.

- **Personal history of stroke or TIA:** About 5 to 14 percent of people of who have a stroke will have another one within a year. Up to 40 percent of people who have a TIA will suffer a stroke. The greatest risk is within the first week of the TIA.
Recovery and Rehab Team

Rehab starts in the hospital as soon as possible after the stroke as part of your recovery. Depending on the severity of the stroke, rehab may continue after you leave the hospital.

Your recovery and rehab team may include:
- **Bronson Stroke Nurse Navigator** will help you and your family while you are in the hospital and through your recovery.
- **Nurses** manage day-to-day care and help make rehab a part of your daily routine.
- **Physical therapy (PT)** helps you regain strength, coordination, balance, and movement. PT will assist with getting in and out of bed, moving from a bed to a chair, balance, and walking.
- **Occupational therapy (OT)** helps you relearn the skills you need for everyday living. This can include eating, toileting, bathing, and dressing. Occupational therapists may also help you work on ways to improve your safety, memory, and thinking skills. They may also work on any vision problems you have related to your stroke.
- **Speech-language pathology (SLP) professionals** help with communication, thinking and swallowing skills.
- **Social workers and case managers** provide counseling and support services for you and your families. They help coordinate rehab and follow up needs after the stroke survivor leaves the hospital if needed. They also help address lifestyle changes.
- **Dietitians** review healthy eating goals. Teach label reading, dining out and cooking tips.
- **Neurologists** are doctors who specialize in the diagnosis and treatment of diseases of the nervous system, which includes the brain and stroke.
- **Neurosurgeons** are doctors with specialized training in surgical treatments of the nervous system, which includes the brain and stroke.
- **Neurointerventional surgeons** are doctors with special training that diagnose and treat certain conditions for stroke.
- **Pharmacists** help the team choose the best medicines for you and are available for education and questions about your medicines.
- **Physical medicine and rehabilitation doctors** have specialized training in rehab and help make an individualized plan that best fits your recovery.
Testing

When a patient comes in with symptoms of a stroke or TIA, the stroke team will gather information. They will do tests to help determine the diagnosis and possible causes of the symptoms.

Depending on your needs testing may include:

- Your medical history, symptoms you experienced, and a neurological exam.
- Blood tests
- CT or “CAT” scan: X-ray that shows the structures of the brain in detail.
- Magnetic Resonance Imaging (MRI): test that looks at inner structures of the brain with magnetic and radio waves.
- Computed Tomography Angiography (CTA): special kind of CT scan that looks at the blood vessels using a dye injected into the vein.
- Carotid Ultrasound: ultrasound test that uses sound waves to see the blood flow through the carotid arteries (arteries in your neck carry blood from the heart to the brain).
- Echocardiogram (ECHO): ultrasound test that uses sound waves to create pictures of heart.
- Transesophageal Echocardiogram (TEE): a type of echocardiogram that uses a long thin tube guided through the mouth and down the throat and esophagus to get pictures of the heart.
- Telemetry Monitor: Heart monitor worn up to 30 days after discharge from the hospital to identify an irregular heart rhythm such as AFib.
Life at Home for Stroke Survivors and their Caregivers

The following pages will help to address the common concerns stroke survivors and their families face when leaving the hospital. You may be nervous about being on your own at home after a stroke. Common concerns are:

- A stroke may happen again.
- Adjusting to new challenges.
- Ability to go home.
- The caregiver may not be prepared to care for you.
- That friends and family will abandon you.

Talking about your concerns may be helpful. You can find a list of support groups on page 48 of this book.

Staying safe and connected:

- Write down emergency numbers in large print on index cards and keep them handy.
- Arrange for people to check in with you regularly.
- Accept help with household chores.
- Keep active with your family and friends.
- Participate in your local support group. See page 48
- Consider purchasing a personal emergency alert device.

Returning to work and driving is something that is specific to each stroke survivor.

- Talk with your doctor about when it will be safe for you to resume these activities.

How to prevent falls at home:

- Move furniture out of your path. Place extra furniture next to a wall or in a less used room.
- Clear paths to the bathroom, kitchen, exits, and bedroom.
- Move electrical cords out of the way.
- Wear non-skid shoes.
- Remove loose carpets or throw rugs in hallways and on stairs.
- Install handrails in stairways.
- Use assistive devices (cane, walker, etc.) as directed by your care provider.

In the bathroom:

- Install handrails.
- Use grab bars in the tub and shower.
- Put non-slip flooring strips inside and outside the tub.
- Use bathtub benches and toilet chairs.
- Use easy-to-use water faucets.
Use adjustable or handheld showerhead.
Use bath supplies that are easy to reach and use.
Consider lowering the temperature on your hot water heater to less than 120 degrees.

Bedroom safety:
- Keep a phone close.
- Have a light switch near your bed.
- Use a nightlight and have a clear path to the toilet.

Getting dressed:
- Wear loose fitting clothes.
- Wear clothes that fasten in the front.
- Replace buttons, zippers, and laces with Velcro fasteners.
- Talk with other stroke survivors for ideas and resources.
- Check websites for adaptable clothing.

Staying safe in the kitchen:
- Use caution if you need to reach across the burners on your stove to adjust temperature control buttons.
- Put a mirror over the stove to help you see the stovetop if you are seated while cooking.
- Keep a fire extinguisher handy.
- Keep a clear space near the stove where you can place a hot pot.
- Keep oven mitts handy.
- Move your most often used items where you can easily reach them.
Coping with Emotions

Many stroke survivors are affected by emotions and mood changes. You may experience sudden laughing or crying spells that may or may not have an explanation. Some things that may help you cope with emotional changes:

- Let people know that you cannot always control your emotions. Explain that the emotions you show on the outside may not reflect how you feel on the inside.
- Distract yourself. If you feel an outburst coming on think of something else. Count backwards or count objects in the room.
- Relaxation techniques may be helpful. Some ideas include: deep breathing, changing your posture, or relaxing your muscles.

Depression

Many people go through depression after a stroke. You can experience feelings of anger, frustration, anxiety, fear, anxiety, and loss. You may not want to take medicines or perform exercises. You may become irritable with others. These can be signs of depression. This may improve over time. Anti-depressant medicine may be helpful.

Some things you can do to help cope with depression:

- Stay in contact with other people.
- Find some leisure activities you can enjoy.
- Stay active in spiritual activities.
- Attend your local stroke support group.
- Take medicines as directed by your doctor.

Have you experienced changes in emotions or mood? □ yes □ no

Has family noticed changes in my mood? □ yes □ no

If you answered “yes” to either question, please talk to your doctor.
Difficulty with Thinking or Concentration

Some people may experience changes in their thinking or concentration after a stroke. The location of the stroke makes a difference in the changes you may have. Some symptoms may include:

- Forgetfulness.
- Confusion.
- Difficulty speaking or understanding what is written and spoken.
- Trouble paying attention or following a conversation.
- Difficulty planning and organizing tasks.
- Difficulty with calculations, making simple decisions, solving problems.

Talk with your doctor if you are having any of the above symptoms.

Helpful ideas:

- Make a routine and stick with it. Do your activities at the same time every day.
- Break down tasks into simple steps.
- Focus on one task at a time.
- When something needs to be done, do it right away or make a note.
- Have a place to put important items so they are easily found like a calendar.
Communication Problems

A stroke may cause damage to the language center of the brain. Language problems can include both understanding and speaking. Your speech-language pathologist will help you with ideas on how to cope with these challenges. Some coping strategies include:

- Write, draw, or use gestures for what you need.
- Speak in short sentences, and ask simple yes/no questions.

The use of a word or picture board may be helpful.

Example of a picture board

<table>
<thead>
<tr>
<th>Pretend Play - Bond</th>
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</thead>
<tbody>
<tr>
<td>I</td>
</tr>
<tr>
<td>what</td>
</tr>
<tr>
<td>Sounds great!</td>
</tr>
<tr>
<td>Sounds terrible!</td>
</tr>
</tbody>
</table>

Skin

Bedsores can be a serious problem if you spend a lot of time in bed or in a wheelchair. Sores may be found on any area of the skin with prolonged pressure such as the buttocks, heel, back of the head, or side of the ankle. You should change your position at least every two hours. Use pillows to support the affected arm or leg. Special mattresses or cushions can reduce pressure and help prevent bedsores. Notify your doctor if you notice any areas of redness or open sores.
Sexual Health

A stroke can affect your sexuality. If you are sexually active, part of getting back into a normal routine involves resuming a healthy sex life. Concern of having another stroke during sex is common. It is unlikely that a stroke will happen during sexual activity. Talk with your doctor before resuming sexual activity to be sure you are healthy enough.

Stroke survivors report a decrease in sexual desire and how often they have sexual relations.

- Women report a strong decrease in vaginal lubrication and the ability to have an orgasm.
- Men often have weak or failed erections and ejaculations.

Talk with your doctor before using medicines that help or correct this problem.

Talking about sex is hard for many people. It is important to talk openly and honestly with your partner about your sexual needs, desires and concerns.
Sleep and Tiredness

Sleep may be a problem after you have had a stroke. This can get better with time. Having trouble sleeping can be frustrating. This can make you feel tired and irritable. One common cause of sleeping problems is sleep apnea. This is caused by abnormal breathing patterns. Symptoms may include loud snoring, shortness of breath, excessive tiredness during the day, memory troubles, headaches and irritability. Other people you live with may notice these changes. Talk with your doctor if your trouble sleeping does not improve.

Treatments for sleep problems may include:

- Avoiding caffeine.
- Going to bed at the same time every night.
- Napping only early in the day.
- Losing weight.
- Limiting alcohol intake.
- Discussing use of sleep medicines with your doctor before trying them.
- Wearing dental appliances at night to help open your airway.
- Sleeping on your side, not on your back.
- Using an assistive breathing machine at night such as CPAP if ordered by your doctor.
Pain

You may have pain for many reasons. Normally pain is a way for your brain to tell you that your body has been hurt. This is not always the case after a stroke. Sometimes a normal touch may feel painful. Pain may be felt in your joints or muscles due to tightness or weakness in your affected limb. Pain after a stroke can be:

- Mild, moderate or severe.
- Constant or on-and-off.
- On part or all of the side of your body affected by the stroke.
- Felt in your face, arm, leg or body.
- Aching, burning, sharp, stabbing or itching.

Treating your pain

To find relief, you must first find the cause of your pain. Pay attention to when it happens and in what part of your body. Does it seem to be caused by something or someone touching you? Tell your doctor about your symptoms. Together you can find the best treatment. Here are some solutions you can try at home.

- Avoid things that can cause pain. This could be hot baths, tight or easily bunched clothing, pressure on the side of your body affected by stroke.
- Only use heat packs or exercises IF prescribed by your physical or occupational therapist. NEVER place a heat pack on an area of your body if your ability to feel hot or cold has been affected by your stroke.
- Stay as active as possible. Not using your muscles may lead to muscle spasm.
- Support a weakened or paralyzed arm on an armrest or pillow to relieve shoulder pain while sitting or lying down. Use a sling while active to reduce shoulder pain. A special sling may be prescribed by your physical or occupational therapist.
- Check the skin under braces often to be sure that sores are not developing.
- Depression is common if you have chronic pain. Discuss with your doctor any feelings of sadness or hopelessness. Counseling and medicine may help.
Spasticity after Stroke

Spasticity is tightness in the muscles of your arms or legs. This is common after a stroke. It may get better over time or stay the same. Some symptoms are:

- Stiffness in the arms, fingers or legs
- Painful muscle spasms
- Uncontrolled movements or jerking
- Change in your normal posture

What treatments are available?
Physical and occupational therapists can help you manage spasticity. Some examples may be:

- Regular stretching
- Exercises
- Splinting or casting
- Cooling techniques
- Medicines
Stroke-Related Websites

American Stroke Association (ASA) - A Division of the American Heart Association:
www.strokeassociation.org

National Aphasia Association:
www.aphasia.org

National Institutes of Health stroke webpage:
http://stroke.nih.gov/

National Stroke Association:
www.stroke.org

Senior Services of Kalamazoo:
http://seniorservices1.org/index.htm

Stroke Smart:
www.strokesmart.org

The Internet Stroke Center at Washington University:
www.strokecenter.org

Driving Rehab Programs

Kalamazoo Area Rehabilitation Services
6376 Quail Run Drive
Kalamazoo, MI 49009
(877) 544-3764

Mary Free Bed Driver Rehabilitation Program
235 Wealthy St. SE
Grand Rapids, MI 49503
(616) 242-0343 or (800) 528-8989
Stroke Support Groups

**Bronson Methodist Hospital Support Group**
Third Thursday of the month (no meetings in July or August) 11 a.m. to Noon
Bronson Gilmore Center for Health Education
601 John Street
Kalamazoo, MI 49007
Free parking available in the Jasper Street Parking Ramp
For more information, call (269) 341-7500

**Bronson Battle Creek Hospital Stroke Support Group**
Third Thursday of the month (no meetings in July or August) 1 to 2 p.m.
YMCA
182 Capital Avenue NE
Battle Creek, MI 49017
For more information, call (269) 441-0957

**Brain Injury Support Group**
Disability Network of Southwest Michigan
Meetings on Thursdays 1:30 to 3:30 p.m.
517 E. Crosstown Parkway
Kalamazoo, MI 49001
(269) 345-1516 ext. 120

**Mary Free Bed Rehabilitation Hospital Stroke Support Group**
First Wednesday of every month 6:15 to 7:30 p.m.
Mary Free Bed Rehabilitation Hospital-2nd Floor Conference Room
235 Wealthy Avenue SE
Grand Rapids, MI 49503
For more information, call (616) 840-8221 or (800) 528-8989

**Three Rivers Health Stroke Support Group**
First Wednesday of every month from 10 to 11 a.m.
Inpatient Rehab Unit
701 S. Health Parkway
Three Rivers, MI 49093
For more information, call (269) 273-9795 or (269) 273-9681

**Speech Therapy Support Group**
Last Wednesday of each month from 10 to 11 a.m.
Portage Conference Center Room
701 S. Health Parkway
Three Rivers, MI 49093
For more information, call (269) 273-9795 or (269) 273-9681
Definitions of Stroke Terms
Definitions of Stroke Terms

Ambulate: to walk
Aneurysm: a weak spot on the wall of the artery that balloons out
Angiography: an X-ray of blood vessels
Antihypertensive: medicines used to lower blood pressure
Antiplatelets/Anticoagulants: medicines used to keep blood clots from forming
Aphasia: trouble speaking and/or understanding spoken or written words
Arrhythmia: an irregular or unpredictable heart beat and/or heart rhythm
Arteriovenous malformation (AVM): blood vessels that are not correctly connected
Atherosclerosis: plaque buildup that causes “hardening” of arteries
Aspiration: when food or liquid enters the lungs or wind pipe
Ataxia: uncoordinated movement
AFib: an irregular heartbeat. A type of heart arrhythmia.
Brain stem: part of the brain that controls activities like breathing, blood pressure and eye movement
Broca’s aphasia: when stroke survivors can understand what is said and written, but have problems talking or writing
Carotid arteries: arteries in the neck that carry blood from the heart to the brain
Carotid endarterectomy: a surgical procedure to remove plaque from the carotid artery to let blood flow more freely to the brain
Carotid stenosis: narrowing of the carotid arteries caused by a build-up of plaque.
Carotid Ultrasound: ultrasound test that uses sound waves to see the blood flow through the carotid arteries
Cerebellum: part of the brain that controls coordination of movement
Cerebrospinal fluid: fluid in the brain and spinal cord
Cholesterol: soft, waxy fat in the bloodstream and cells
Cognition: process of knowing, including awareness, perception, reasoning, remembering and problem solving
Continence: ability to control body functions, especially bowel and bladder use
Contracture: condition where a muscle becomes tight and resistant to stretching
CT or “CAT” scan: X-ray that shows the structures of the brain in detail
Doppler ultrasound: test that looks at blood flow through arteries and veins
Dysarthria: difficulty speaking due to problems with muscles in the face
Dysphagia: difficulty swallowing
Echocardiogram (ECHO): ultrasound test that uses sound waves to create pictures of heart
Edema: swelling due to fluid retention
Emotional lability: sudden changes in emotions
Hematoma: bruise in an organ or tissue
Hemianopia: partial vision loss in one or both eyes
Hemiplegia: inability to move one side of the body
Hemorrhagic Stroke: stroke caused by a break in a vessel in the brain causing bleeding in the brain
Hypertension: high blood pressure
Hypoxia: low level of oxygen in the body
Infarct: area of dead tissue
Intracerebral hemorrhage: stroke caused by bleeding in the brain
Ischemic Stroke: stroke caused by plaque or clots that block a blood vessel in the brain
Left Hemisphere: left half of the brain that controls the right side of the body
Magnetic Resonance Imaging (MRI): test that looks at internal structures with magnetic and radio waves
Neglect: lack of attention to objects or actions on one side of the body
Occlusion: blocked blood vessel
Occupational Therapy (OT): help relearn the skills you need for everyday living. This can include eating, toileting, bathing, and dressing
Penumbra: area of the brain around the stroke that is in danger of dying, but is not permanently damaged
Physical Therapy (PT): help regain strength, coordination, balance, and movement
Plaque: deposits in the inner lining of the artery
Platelets: blood cell that stick together to form clots
Pseudobulbar Affect: inappropriate involuntary laughing or crying due to certain neurological conditions or brain injuries
Right hemisphere: right half of the brain that controls the left side of the body
Spasticity: tightness in the muscles of your arms or legs
Speech -Language Pathology (SLP): help with communication, thinking, and swallowing skills

Stenosis: reduction in the size of a blood vessel

Stroke: The sudden interruption of blood flow to a part of the brain

Subarachnoid hemorrhage: a stroke caused by bleeding under the membrane surrounding the brain.

Thrombolytic Agents: a medicine that works to dissolve stroke-causing clots.

Thromboembolism/Embolic Stroke: a clot that travels through the bloodstream and blocks another vessel

Thrombosis: Blood clot in a blood vessel

Thrombotic Stroke: A stroke caused by a blood clot stopping the blood flow through an artery

Transesophageal Echocardiogram (TEE): a type of echocardiogram that uses a long thin tube guided through the mouth and down the throat and esophagus to get pictures of the heart

Transient ischemic attack (TIA): a brief interruption of blood flow to the brain. This causes temporary stroke symptoms lasting less than 24 hours.

Vertebrobasilar Arteries: the arteries in the back of the neck that supply blood to the brain stem and cerebellum.
**Blood Pressure Tracking**

Knowing your blood pressure is important to your overall health and stroke management.

**If the top number of your blood pressure is above 180 on two separate readings please call your doctor’s office. If your high blood pressure is associated with other symptoms such as chest pain or stroke symptoms call 911.**

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