

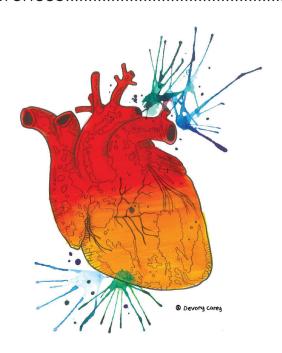
### THE HEART FAILURE MANUAL

Information on managing and improving your condition



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### **HEART FAILURE ZONES**

### KNOW YOUR ZONE: GREEN, YELLOW OR RED

EVERY DAY	<ul> <li>Weigh yourself daily in the morning before breakfast and write it down.</li> <li>Take your medicines the way you were taught.</li> <li>Check for swelling in your feet, ankles, legs and stomach.</li> <li>Eat low salt food.</li> <li>Balance activity and rest periods.</li> </ul>
GREEN ZONE	All Clear — This zone is your goal Your Symptoms Are Under Control If You Have:  No shortness of breath  No weight gain  No swelling in your legs, feet, hands or stomach  No chest pain
YELLOW ZONE Please call the Nurse Line at (512) 324-2391	<ul> <li>Caution — This zone is a warning</li> <li>Call the Nurse if:</li> <li>You have weight gain of more than 3 pounds in one day or 5 pounds in one week</li> <li>More shortness of breath or chest pain</li> <li>More swelling in your feet, hands or stomach</li> <li>Feeling more tired, no energy</li> <li>Dizziness</li> <li>Dry hacky cough</li> <li>You have to sleep in a chair (cannot lay down due to shortness of breath)</li> </ul>
RED ZONE Call 911	EMERGENCY  Go to the emergency room or call 911 if you have any of the following:  • Struggling to breathe or cannot breathe.  • Unrelieved shortness of breath while sitting  • Severe chest pain  • Have confusion or cannot think clearly  • Fainting

# HEALTH CALENDAR MONTH:

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Wednesday		Wt	ВР	품		Wt	ВР	표	Wt	ВР	# 		Wt	ВР	HR		Wt	BP	HR
Tuesday		Wt	ВР	HR		Wt	ВР	HR	Wt	ВР	#   		Wt	ВР	HR		Wt	ВР	표
Monday		Wt	ВР	HR		Wt	ВР	HR	Wt	ВР	HR		Wt	ВР	HR		Wt	ВР	유

## Daily Activities:

- Weigh every morning (Target Weight:\_
- **Check Blood Pressure** (Target Range\_
- . Take Medications as taught
- appointments with your 4. Go to all follow up doctors.

## Fluid Restriction:

## salt (Sodium)

## Restriction:

## Who to call first?

## When to call:

- Weight gain of 3 lbs in 1
  - day or 5 lbs in 1 week More shortness of
    - breath
- More swelling in your feet, hands, legs or stomach
  - Out of range blood pressures

## mportant Numbers:

seton Nurse Line 512) 324-2391

## Cardiologist:

Primary Care:

Home Health Care:

## HEALTH CALENDAR MONTHE

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- **Check Blood Pressure** (Target Range\_
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### Salt (Sodium) Restriction:

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- More swelling in your feet, hands, legs or stomach
- Out of range blood pressures

### mportant Numbers: **Seton Nurse Line**

## Cardiologist:

## Primary Care:

Home Health Care:

## HEALTH CALENDAR

MONTH:

Primary Care: Sunday H H ⋠ BP 품 × BP 품 . لإ BP 품 ⋠ ВР H ₹ BP Saturday 품 ₹ H × BP H ⋠ BP H ₹ ВР H × BP ВР Friday H H ₹ HR × H × × BP ⋠ BP BP BP ВР Thursday H H × H × H H × × ВР HR ВР ВР ВР ВР ₹ Wednesday ⋠ BP H H × BP H BP. H ⋠ BP H × BP 품 Tuesday \* ₹ H. ₹ 품 ¥. BP 품 ВР 품 ₹ BP H ВР BP Monday BP ⋠ ВР ⋠ ВР ⋠ ВР ⋠ ВР

## Daily Activities:

- 1. Weigh every morning (Target Weight:
- 2. Check Blood Pressure (Target Range\_
- Take Medications as taught
- 4. Go to all follow up appointments with your doctors.

## Fluid Restriction:

### Salt (Sodium) Restriction:

## Who to call first?

## When to call:

- Weight gain of 3 lbs in 1 day or 5 lbs in 1 week
  - More shortness of breath
- More swelling in your feet, hands, legs or stomach
  - Out of range blood pressures

### mportant Numbers: Seton Nurse Line (512) 324-2391

Cardiologist:

Home Health Care:

### WHEN TO CALL THE DOCTOR

### EMERGENCY

If you have sudden, severe symptoms such as chest pain or severe shortness of breath, call 911 or go to the emergency department.

### **URGENT**

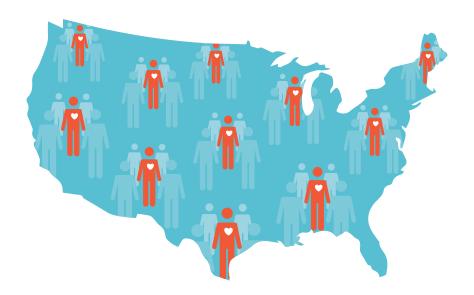
Call the Nurse if you have:

- Weight gain 3 pounds in one day or 5 pounds in one week
- New or more swelling of legs, feet, hands or stomach
- New or more shortness of breath
- Unable to lay flat at night
- Wake up in the middle of the night gasping for air
- Bad cough that does not improve
- New or more feelings of being tired or no energy

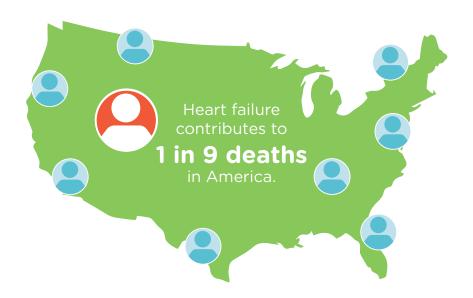
Seton Nurse Line ...... (512) 324-2391

Our goal at the Seton Healthcare Family is to turn your heart failure into heart success!

### **HEART FAILURE FACTS**



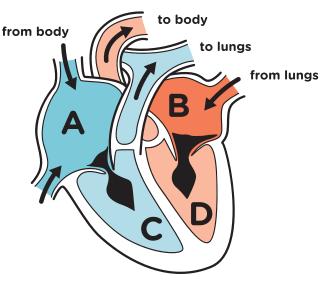
- If you are over the age of 40, you have a 1 in 5 chance of developing heart failure.
- The number of people with heart failure continues to rise in the U.S. More than 5.1 million people in the U.S. have heart failure.
- More than half a million new cases of heart failure have been diagnosed every year for the last 10 years.



Despite these troubling facts, heart recovery is possible with proper medications, diet and exercise.

### What does the heart do?

To put it simply, the heart is a pump. Its job is to pump the blood that delivers oxygen and nutrients through the body. The heart squeezes and relaxes about 60-90 times per minute. There are four chambers of the heart — the right atrium (A), right ventricle (C), left atrium (B), and left ventricle (D). The blood enters the heart through the right atrium then is pushed into the right ventricle. The right ventricle pushes the blood to the lungs, where the blood collects oxygen. It returns to the heart through the left atrium and is pushed to the left ventricle. The left ventricle has the



very important job of pushing the blood throughout the body. The heart is a strong muscle and it must work effectively in order for the body to get the important oxygen and nutrients that it needs.

### What is heart failure?

Heart failure is when your heart is damaged or weakened and is no longer able to pump blood through your body like it used to. Imagine a car accident on a three lane highway. Cars can now only pass in one lane. Fewer cars are moving forward and more cars are backing up. In heart failure, your heart pumps less blood forward and blood backs up in your veins. The back up of blood causes the "CHF" or congestive heart failure symptoms. Fluid can back up into your lungs, arms, legs or abdomen causing what is sometimes referred to as "congestion". Heart failure can include one side of the heart (left or right) or both sides of the heart (combined left and right heart failure).

### What is an ejection fraction?

Ejection fraction, or EF for short, is the amount of blood that is pumped out of the heart during each beat. For people with normal hearts, this amount is 50-75% of their blood. Many people with heart failure have an EF that is 40% or less. A belownormal EF means that your heart is not pumping as well as it should. Measuring EF is one of the ways doctors diagnose what kind of heart failure you have.

**50–75%**Heart's pumping ability is

**NORMAL** 

41–49% Heart's pumping ability is

> BELOW NORMAL

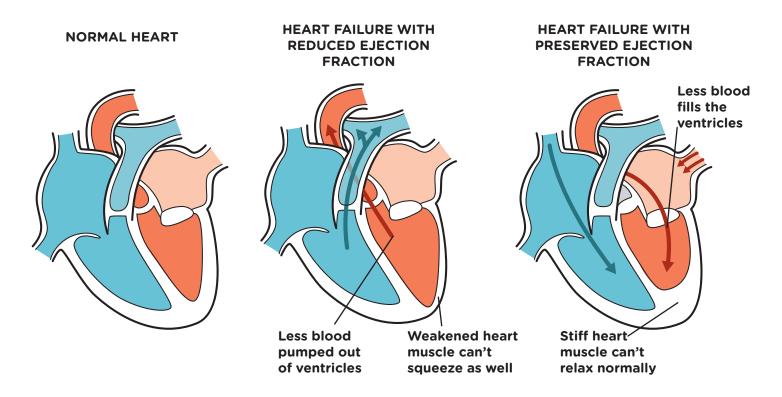
**40% and Below**Heart's pumping
ability is

LOW

### What is left-sided heart failure?

There are two types of left-sided heart failure:

- 1. Heart failure with reduced ejection fraction (HFrEF)
- 2. Heart failure with preserved ejection fraction (HFpEF).
- Heart failure with reduced ejection fraction (HFrEF) is when you have a weak heart and the heart muscle does not have the strength to contract or pump as it should. With this kind of heart failure, the left side of the heart cannot create enough force to pump the blood through your body and organs. People with this type of heart failure usually have an EF, or Ejection Fraction, of less than 40%.
- Heart failure with preserved ejection fraction (HFpEF) is when the heart is stiff
  and it does not properly fill with blood while at rest. Less blood filling the pump
  (your heart) equals less blood being pumped out. People with this type of heart
  failure usually have an EF, or ejection fraction, that may be normal (or around 50
   75%).



### What is right-sided heart failure?

The right side of the heart pumps blood that is "used" into the lungs to be refilled with a fresh supply of oxygen. The oxygen-rich blood returns to the left side of the heart, which then pumps it to the rest of the body. When the right side of the heart is not able to pump blood into the lungs properly, this is known as "right-sided heart failure." With right-sided heart failure, the right side of the heart is not pumping like it should, thus causing blood to back up. This causes symptoms such as swelling in the legs, ankles, stomach or liver.

### SIGNS AND SYMPTOMS OF HEART FAILURE

**Signs** are what you or your doctor can see, hear, feel and touch, as well as test and lab results that are not normal.

- Enlarged neck veins on your right side
- Abnormal sounds in your lungs
- A liver is that is larger than normal
- Your heart sounds abnormal
- Swelling where you should not have any feet, legs, belly, face, or around the eyes
- Abnormal results from your blood tests
- Abnormal heart ultrasound (echocardiogram)

Notes:				
Motes.				

**Symptoms** are what you feel that is not normal.

- Feeling tired and finding it more difficult to perform your daily activities
- Shortness of breath during activity or at rest
- Swelling in your legs, feet, hands or stomach
- Chest pain
- Feeling your heart race or throbbing
- You cannot lie flat at night
- Suddenly not being able to breathe in the middle of the night
- Having to change from your normal sleeping position by increasing how many pillows you use or needing to sleep in an easy chair

### **GENERAL TIPS FOR MANAGING MEDICATIONS**

Always keep an **updated medication list** in your wallet or purse. Update the list every time a provider tells you to start or stop a medication, or changes your dosage amount. Write the date on the list when you update it.

Talk with your heart failure provider before taking ANY over the counter medications including cough and cold medications, as well as pain relievers such as ibuprofen (Advil), naproxen (Aleve), Excedrin, etc. In general, these medications (Advil, naproxen, Aleve, Excedrin) can worsen heart failure symptoms and are not recommended for use. Ask your provider before starting herbal products, supplements, or vitamins. Some medications you can buy at the store are not good for patients with heart failure.

Create a system for keeping up with refills. Request refills at least one week before you will run out of a medication. Ask your pharmacy about signing up for refill reminders. This allows time for approval, insurance processing and the pharmacy to order the medication if needed.

### Remember to take medications on time

It is not safe to start or stop medications without talking with your provider. Do not skip or take extra doses unless your provider tells you to. Use a calendar, pill box and medication list to keep track of your medications. Mark off each day on a calendar after you have taken a medication, or keep a running list of the medications you've taken and the time of your last dose. Consider setting a cell phone alarm to remind you when it is time to take medications.

Combine taking medications with daily routines such as such as brushing your teeth or making morning coffee.

### If you have any of these concerns, talk with your provider

- You're not sure why you are prescribed a medication
- You have side effects or are worried about side effects
- Your medications are too expensive
- You're not sure if your medication is working
- You think you are taking too many medications
- Your medication is hard to use. This sometimes happens with injections and inhalers. Ask your provider or pharmacist to show you the best way to use your medication.

### **MEDICATIONS USED TO TREAT HEART FAILURE**

### **ANGIOTENSIN - CONVERTING ENZYME (ACE) INHIBITOR**

### YOUR MEDICATION

- Works by relaxing and widening the blood vessels, allowing blood to flow more easily
- Lowers blood pressure and help reduce how hard the heart has to work
- Helps strengthen the heart's pumping ability in people who have a weak heart
- Decreases symptoms such as shortness of breath and swelling in people who have a weak heart
- Helps prevent heart attacks and strokes
- Prolongs lifespan in those who have a weak heart
- Commonly used to treat high blood pressure and may be used to help the kidneys work better in people with diabetes

### **COMMON NAMES**

Lisinopril (Zestril®, Prinivil®)

Benazepril (Lotensin®)

Ramipril (Altace®)

Perinopril (Aceon®)

Moexipril (Univasc®)

Enalapril (Vasotec®)

Captopril (Capoten®)

Fosinopril (Monopril®)

Quinapril (Accupril®)

Trandolapril (Mavik®)

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Increased potassium level

Dizziness or lightheadedness

Dry cough

Swelling of the mouth or throat

Birth defects or fetal death

### **COMMENTS**

Blood tests will be done frequently to monitor potassium levels.

Check your blood pressure and notify your physician.

This is a common, non-life threatening reaction. Please notify if cough is persistent or bothersome.

This symptom is called angioedema. Notify your doctor immediately if your mouth swells. If you become short of breath or your throat starts to itch or swell call 911.

Take proper birth control measures; inform your doctor or nurse

immediately if you become pregnant.

- It is very important to take this medication as prescribed by your doctor.
- These medications may be taken with or without food.
- Do **NOT** take the medication and call 911 right away if you have swelling of the lips, tongue, face, and/or throat.
- Do **NOT** take if you are pregnant.

### ANGIOTENSIN RECEPTOR BLOCKER (ARB)

### YOUR MEDICATION

- Works in the kidneys to block hormones that cause high blood pressure
- Lowers blood pressure
- Helps protect the kidneys if you have diabetes
- Is used as an alternative to ACE-Inhibitor
- Lowers the risk of death for people who have heart failure
- Lowers the risk of stroke and heart attack

### **COMMON NAMES**

Losartan (Cozaar®)

Valsartan (Diovan®)

Candesartan (Atacand®)

Eprosartan (Teveten®)

Olmesartan (Benicar®)

Azilsartan (Edarbi®)

Telmisartan (Micardis®)

Irbesartan (Avapro®)

SIDE EFFECTS	COMMENTS
Low blood pressure	Check your blood pressure at home.
Increased potassium level	Blood tests will be done frequently to monitor potassium levels.
Dizziness or lightheadedness	Check your blood pressure and call your doctor.
Kidney problems	Tested by blood tests; check how often to get tested.
Angioedema - Swelling of the mouth or throat	Stop taking this medication and notify your doctor immediately if your mouth starts to swell. If you become short of breath or your throat starts to swell or itch call 911.
Birth defects or fetal death	Take proper birth control measures; inform your doctor or nurse immediately if you become pregnant.

- It is very important to take this medication as prescribed by the doctor.
- These medications may be taken with or without food.
- Do NOT take if you are pregnant. Talk to your doctor if you are planning on becoming pregnant.

### **BETA BLOCKER THERAPY**

### YOUR MEDICATION

- Works by relaxing the heart muscle and slowing down the heart rate
- Lowers blood pressure and help reduce how hard the heart has to work
- Helps strengthen the heart's pumping ability in people with a weak heart
- Decreases symptoms such as shortness of breath and swelling in people with a weak heart
- Helps prevent heart attacks
- Prolongs life in those with a weak heart
- Reduces chest pain

### **COMMON NAMES**

Metoprolol (Lopressor®,

Toprol®)

Carvedilol (Coreg®)

Bisoprolol (Zebeta®)

Nebivolol (Bystolic®)

Atenolol (Tenormin®)

Propranolol (Inderal®)

SIDE EFFECTS	COMMENTS
Low blood pressure or low heart rate	Check your blood pressure and heart rate daily.
Dizziness or lightheadedness	Check your blood pressure and heart rate. Notify your doctor.
Shortness of breath or bronchospasm	May cause wheezing if you have asthma or COPD. Contact your doctor if this occurs.
Tiredness	This tends to go away after 1-2 weeks on the medication.
Erectile dysfunction	Please discuss with your doctor at your next scheduled visit.

- It is very important to take this medication as prescribed by the doctor.
- These medications may be taken with or without food.
- Check your blood pressure and heart rate daily.
- This medication should be used with caution in patients with a history of asthma.

### **SACUBITRIL/VALSARTAN (ENTRESTO®)**

### YOUR MEDICATION

- Combination drug containing
  - Neprilysin inhibitor: Helps open up blood vessels
  - ARB (Angiotensin Receptor Blocker): see ARB Section
- Prolongs life expectancy in those with a weak heart

SIDE EFFECTS	COMMENTS
Low blood pressure	Check your blood pressure at home.
Increased potassium level	Tested by blood tests; check how often to get tested.
Kidney problems	Tested by blood tests; check how often to get tested.
Swelling in lips or throat	Occurs rarely, but if it does, seek medical attention immediately.
Birth defects or fetal death	Take proper birth control measures; inform your doctor or nurse immediately if you become pregnant.

- It is very important to take this medication as prescribed by the doctor.
- These medications may be taken with or without food.
- Check your blood pressure and heart rate daily.
- Can be used instead of other ACE inhibitors or ARBs.
- Cannot be taken with ACE inhibitor or ARB.
- Take this medicine two times a day.
- Do NOT take this medication while pregnant.
- If you have been prescribed Entresto and are currently taking an ACE inhibitor, first you must STOP taking your ACE inhibitor and WAIT 36 hours before starting your new prescription for Entresto.
- Talk to your doctor or pharmacist before taking Entresto if you are not sure if you take an ACE inhibitor medication.

### **IVABRADINE (CORLANOR®)**

### YOUR MEDICATION

- Works by slowing down your heart rate
- Is used only if you have stable heart failure
- Can be used in addition to beta blocker therapy or can be used in place of beta blocker therapy

SIDE EFFECTS	COMMENTS
Slow heart rate	Check your heart rate (pulse) at home daily.
Abnormal heart rhythm	Notify your doctor or nurse immediately.
Phosphene (seeing stars)	May appear within 2 months of starting the medication and continue off and on. Let your doctor or nurse know if you experience vision problems.
Can cause harm to an unborn baby during pregnancy (fetal toxicity)	Take proper birth control measures; inform your doctor or nurse immediately if you become pregnant.

- It is very important to take this medication as prescribed by the doctor.
- These medications may be taken with or without food.
- Check your blood pressure and heart rate daily.
- This medication should be used with caution in patients with a history of asthma.

### NITRATE THERAPY

### YOUR MEDICATION

- Works by relaxing and widening the blood vessels, allowing blood to flow more easily
- Given to treat chest pain
- Lowers blood pressure and help reduce how hard the heart has to work

### **COMMON NAMES**

Nitro sublingual (Nitrostat®)
Nitro spray (NitroMist®,
Nitrolingual®)
Nitro paste (Nitro-Bid®)
Nitro patch (Nitro-Dur®)
Isosorbide mononitrate
(Imdur®, Ismo®)
Isosorbide dinitrate (Isordil®)

SIDE EFFECTS	COMMENTS
Low blood pressure	Check your blood pressure at home daily.
Dizziness or lightheadedness	If you feel dizzy or feel like you are going to faint, call your doctor.
Headache	Check your blood pressure and notify your doctor.
Flushing of the face and neck	Tell your doctor at your next visit.

- It is very important to take this medication as prescribed by your doctor.
- For sublingual nitroglycerin: when you have chest pain, put one tablet under your tongue and let it dissolve. You may take one tablet every 5 minutes for a total of three times. If pain does not go away after three doses, call 911.
- If you are using a nitroglycerin patch, take the patch off 12 hours after you put it on. Wait for 12 hours before putting on another patch.
- Use a calendar, pill box, and/or medication list to help you take your medications at the correct time.
- If you are given sublingual nitroglycerin, keep at room temperature in the original glass container with lid on tight. Carry medication with you at all times.
- Do NOT use this medication if you are currently taking a medication for erectile dysfunction like Sildenafil (Viagra), Tadalafil (Cialis), Vardenafil (Levitra), or Avanafil (Stendra)

### **VASODILATOR THERAPY**

### YOUR MEDICATION

- Works by relaxing and widening the blood vessels, allowing blood to flow more easily
- Helps reduce how hard the heart has to work
- Decreases symptoms such as shortness of breath and swelling in people with a weak heart
- Helps prevent chest pain
- Helps extend life in people with a weak heart

### **COMMON NAMES**

Hydralazine (Apresoline®) Hydralazine/ Isosorbide dinitrate combination (BiDil ®) Isosorbide dinitrate (Isordil®)

SIDE EFFECTS	COMMENTS
Low blood pressure	Check your blood pressure at home daily.
Dizziness or lightheadedness	Check your blood pressure. Tell your doctor.
Headache	Check your blood pressure. Tell your doctor.
Flushing of the face and neck	Tell your doctor.
Upset stomach, loss of appetite, diarrhea	These medications should be taken with food to avoid upset stomach.
Fever	Call your doctor.
Joint pain or swelling	Tell your doctor at your next visit.

- It is very important to take this medication as prescribed by your doctor.
- Check your blood pressure daily.
- Do NOT use medication if you are currently taking a medication for erectile dysfunction like Sildenafil (Viagra), Tadalafil (Cialis), Vardenafil (Levitra), or Avanafil (Stendra)

### **LOOP DIURETICS**

### YOUR MEDICATION

- Works to reduce congestion, shortness of breath, swelling and abdominal bloating by preventing the absorption of potassium and sodium in the kidneys. Therefore this drug makes you remove more water, potassium and sodium through your urine
- Known as a "water pill"

### **COMMON NAMES**

Furosemide (Lasix®)
Torsemide (Demadex®)
Bumetanide (Bumex®)

SIDE EFFECTS	COMMENTS
Dehydration	If you have a dry mouth, have increased fatigue or weakness call your doctor.
Dizziness or lightheadedness	Check your blood pressure and notify your doctor.
Low sodium (hyponatremia)	Your blood will need to be monitored regularly. Please ask your doctor how frequently you need blood work. Eating more sodium will not cause an increase in sodium in your blood.
Decreased potassium (hypokalemia)	Your blood will need to be monitored regularly. You may need to take a potassium supplement.
Muscle cramping	Notify your doctor.
Decreased magnesium (hypomagnesemia)	You will need to have your blood checked regularly. You may need to take a magnesium supplement.
Ear toxicity (damage)	Please notify your doctor if you have hearing changes, ringing in your ears or vertigo (room spinning).
Kidney damage	Please check with your doctor about how often you need blood work to check your kidneys.

- It is very important to take this medication as prescribed by your doctor.
- These medications may be taken with or without food.
- Can be given through an IV, muscular injection or by mouth.
- Do NOT take if you are pregnant.

### ALDOSTERONE ANTAGONIST THERAPY

### YOUR MEDICATION

- Works by blocking a harmful stress hormone in the body
- Lowers blood pressure
- Decreases symptoms such as shortness of breath and swelling in people with a weak heart
- Gets rid of extra water through the urine
- Prolongs life in those with a weak heart

### **COMMON NAMES**

Spironolactone (Aldactone®)

Eplerenone (Inspra®)

SIDE EFFECTS	COMMENTS
Growth in breasts (in men)	Talk to your doctor.
Breast pain or tenderness (in men and women)	Talk to your doctor.
High potassium levels	Blood tests will be done frequently to monitor potassium levels.
Frequent urination	Talk to your doctor.
Dehydration	Call your doctor.

- It is very important to take this medication as prescribed by your doctor.
- With or without food.
- Weigh yourself daily to prevent dehydration or fluid buildup.
- Try to avoid salt substitutes and foods high in potassium like beans and bananas, if your doctor has told you your potassium is high.
- Check your blood pressure regularly.

### THIAZIDE DIURETIC

### YOUR MEDICATION

- Preventing sodium absorption in the kidneys causing water and sodium removal through the urine
- Known as a "water pill"
- Not as strong of a diuretic compared to loop diuretics
- Lowers blood pressure
- Decreases swelling in your extremities

### **COMMON NAMES**

Chlorthalidone

Metolazone (Zaroxolyn®)

Chlorothiazide (Diuril®)

Indapamide (Lozol®)

Hydrochlorothiazide

(Microzide®, Esidrix®)

Triamterene/

 $Hydrochlorothiazide\ (Maxzide^{\circledast},$ 

Dyazide®)

SIDE EFFECTS	COMMENTS
Decreased Potassium Levels	Your blood will need to be monitored regularly. You may need to take a potassium supplement.
Dizziness or lightheadedness	Check your blood pressure and notify your doctor.
Low sodium (hyponatremia)	Your blood will need to be monitored regularly. Please ask your doctor how frequently you need blood work. Eating more sodium will not cause an increase in sodium in your blood.
Low blood pressure (hypotension)	Check your blood pressure regularly.
Decreased magnesium (hypomagnesemia)	You will need to have your blood checked regularly. You may need to take a magnesium supplement.

- It is very important to take this medication as prescribed by your doctor.
- These medications may be taken with or without food.
- Is sometimes used in combination with a loop diuretic. If taken with a loop diuretic, thiazide should be taken 30 minutes to 1 hour prior to loop diuretic.
- Do **NOT** take if you are pregnant.

### POTASSIUM SUPPLEMENT

### YOUR MEDICATION

- Some heart medications will remove potassium from your body, therefore you may need a potassium supplement
- Potassium is an electrolyte in your body which is essential for normal function of the heart, digestive and muscular systems
- Normal level of potassium is 3.5-5.2

### **COMMON NAMES**

Potassium Chloride (Klor-Con®, K-Dur®)

### SIDE EFFECTS

Increased potassium levels

Heart rhythm changes (arrhythmias)

Nausea, vomiting and/ or diarrhea

### **COMMENTS**

Blood tests will be done frequently to monitor potassium levels.

If you are having palpitations, notify your physician.

Please notify your doctor.

- It is very important to take this medication as prescribed by your doctor.
- These medications may be taken with or without food.
- Do **NOT** take if you are pregnant.
- Potassium comes in different forms such as IV, pill, liquid and powder.

### **MAGNESIUM SUPPLEMENT**

### YOUR MEDICATION

- Some heart medications will remove potassium from your body, therefore you may need a potassium supplement
- Magnesium is a mineral in your body that is essential for normal function of the heart and brain
- Normal level of magnesium is 1.8-3.0

### **COMMON NAMES**

Magnesium Oxide Slo-Mag (Magnesium Chloride)

### SIDE EFFECTS

Increased magnesium levels

Nausea, vomiting and/ or diarrhea

### **COMMENTS**

Blood tests will be done frequently to monitor magnesium levels.

Please call your doctor if these symptoms occur.

- It is very important to take this medication as prescribed by your doctor.
- These medications may be taken with or without food.
- Call 911 right away if you have swelling of the lips, tongue, face, and/or throat.
- Do **NOT** take if you are pregnant.

### DIET

### Salt (Sodium)

If you have heart failure, you should take in no more than 2000 milligrams or 2 grams of salt per day. Depending on your status, your doctor may want you to be on a low salt and fluid restricted diet. Salt has been shown to cause your body to retain water and can stop your water pill from working properly. Salt can also cause your blood pressure to rise and can cause cramping at night. Even if the sodium level in your blood is low, you still need to watch your salt intake. Many foods have hidden salt and it is important to learn how to read labels. There is an example of a food label to the right. You can see that sodium content is listed as 470 mg. One rule of thumb is to never add any salt to any food. Limit going out to eat at restaurants, as they load up salt in food for flavor. Some examples of food that contain a lot of salt include canned food, fast food, instant soup, cheese, and cured meat.

Nutr			cts
Serving Size	3 oz. (85	g)	
Serving Per	Container	2	
Amount Per S	erving		
Calories 20	00 (	Calories fron	n Fat 120
		% Dail	y Value*
Total Fat 1	5g		20 %
Saturated I	Fat 5g	5 S	28 %
Trans Fat 3	3g		
Cholesterol 30mg			10 %
Sodium 47	0mg	6	28 %
Total Carb	ohydrate	30g	10 %
Dietary Fib	er 0g		0 %
Sugars 5g			
Protein 5g		, 11	
Vitamin A 5%		Vitor	nin C 2%
Calcium 15%	•	Iron !	/-
	•		,,,
*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.			
	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol Sodium	Less than	300mg 2,400mg	300mg 2,400mg
Total Carbonhydrate		2,400mg	2,400mg
Dietary Fiber		25g	30g



### Examples:

- Ramen noodle soup has 875 mg of sodium
- Canned tomato soup has 480 mg of sodium
- Slice of pizza has around 640 mg of sodium
- Slice of white bread around 147 mg of sodium

### **DASH Diet**

The Dietary Approaches to Stop Hypertension (DASH) diet is a plan that focuses on healthy eating to help lower high blood pressure. The plan encourages a low salt diet including eating more fruits, more vegetables, beans, nuts and low fat or nonfat dairy products. The plan also includes eating whole grains, lean meats, fish and chicken. The diet has been shown to help lower blood pressure, support healthy weight loss, and lower blood sugar levels. DASH encourages you to eat no more than 2,000 calories a day along with a lower salt intake.



### What is a serving?

A serving is the amount of food for one person. Examples of a serving size include:

- Whole grains: 1 slice of wholewheat bread or 1/2 cup cooked rice
- Fruits: 1 medium fruit, 1/2 cup fruit, or 4 ounces of juice
- Vegetables: 1 cup of leafy greens or 1/2 cup of cut-up raw or cooked vegetables
- Nuts, seeds and dry beans:
   1/3 cup nuts or 1/2 cup cooked beans

Food Types	Number of daily servings for a 2000 calorie diet
Whole grains	7–8
Fruits	4-5
Vegetables	4-5
Nuts, seeds and dry beans	4–5 per week
Low fat or nonfat dairy	2-3
Lean meats, fish and chicken	2 or less
Fats and oils	2-3
Sweets	5 serving or less a week

- Low fat or nonfat dairy: 1 cup milk, 1 cup low fat yogurt, or 11/2 ounces cheese
- Lean meats, fish and chicken: no more than 6 ounces a day
- Fats and oils: 1 teaspoon oil, 1 teaspoon butter, or 1 tablespoon of salad dressing
- Sweets: 1 tablespoon sugar or 1 tablespoon jelly

### Fluid

Depending on your health status, your doctor may put you on a fluid restriction. A normal fluid restriction is 2000 milliliters or 2 liters per day, though it can be lower. If you are on a fluid restricted diet, remember that all liquids are included such as tea, juice, milk, ice cream, Jell-O® and ice. You can use a 2 liter bottle to measure or you may use a measuring device.

Each cup of fluid contains 240 milliliters of fluid. That means that if you are on a 2 liter fluid restriction you can take in about 8 cups of liquid per day.



### LIFESTYLE MANAGEMENT

### Exercise

Staying active has been shown to improve cardiac function and overall well-being. Aerobic exercise uses large muscle groups and is the suggested form of exercise. Examples of aerobic exercise include walking, running, bicycling and swimming. Before and after exercising, be sure to warm up as well as cool down. A warm up should include slow-paced walking (bicycling or swimming) then



moving into a faster pace. Finish your exercise with a cool down that involves slowpaced walking (bicycling or swimming). Begin your exercise program, for example, with walking.

Do this three (3) times a day, 5-10 minutes at a time. When you can exercise for the full 10 minutes three (3) times a day comfortably, then advance to the next step.

Progressing activity as tolerated is important. A good 'rule of thumb' is to add five (5) minutes to your time once a week with a goal of 30-45 minutes of exercise, three (3) to five (5) days per week. You should watch how hard you are working during exercise and stay in a mild to moderate range. This means that you should exercise at a level in which your heart rate is elevated, but you can still talk.

The 'Talk / Breath Test' simply states that if you are breathing so hard during exercise that you are unable to talk at the same time, you are exercising above the moderate level and should slow down. Make sure to rest when feeling more tired or short of breath during activity. Stop immediately if you feel any chest pain.



You may be eligible for cardiac rehab. Cardiac rehab is a program that offers an individualized and personalized treatment plan, including instruction on nutrition, stress management, self-care, and physical activity and exercise. If you participate in a cardiac rehab program. you will receive further guidelines about exercise.

### **Tobacco cessation**

### If you currently use tobacco, you should stop immediately.

Tobacco is made up of nicotine and other harmful materials that harm every part of your body. These chemicals can cause fatty plaque build-up in your blood vessel, which can hurt the artery walls.

NORMAL ARTERY

NARROWING
OF ARTERY

Lipid deposit
of plaque

Smoking raises your heart rate, tightens major blood vessels and causes irregular heartbeats. All of these can make your heart work harder. Smoking also raises your blood pressure, which can lead to a higher risk of stroke. Smoking can also lead to a higher risk of other health illnesses such as cancer or breathing problems (COPD) that can make your heart failure symptoms worse.



Electronic cigarettes or e-cigarettes work by heating a liquid containing nicotine and turning it into a vapor or steam. That vapor is then inhaled and exhaled giving the body the nicotine.

Currently there is not enough research data to support its safety as a cigarette replacement. The e-cigarettes are currently not managed by the FDA. This means the type and amounts of each material that make up the liquid are not known. By not knowing the amount of nicotine you receive with each inhale, you raise the risk of nicotine poisoning.

Quitting smoking can be hard but it is possible if you are ready. You are not alone in the fight to quit smoking. There are many resources available to help you quit smoking, which include telephone counseling, support groups, medications and replacement products like gum or patch therapy. You should speak to your doctor about the best option for you.

Monitoring and recording daily weight, blood pressure and pulse WEIGHT should be checked daily in the morning before breakfast. Weigh yourself and write it down. This should be done without clothes and after going to the bathroom.



**BLOOD PRESSURE** should be checked with an automatic blood pressure cuff, which goes around the upper arm. Your blood pressure should be checked at the same time every day.



Your **PULSE** or heart rate will most likely be checked by your automatic blood pressure cuff, but if yours does not, you can count

your pulse by placing your index and middle finger on the thumb side of your wrist. Count the beat of your pulse for one minute. Your pulse should be checked at the same time every day.

Be aware that many things may affect your blood pressure and pulse.

Minimal changes are okay. If there are major changes, you should call your doctor.

### **Self-management**

Self-management is **VITAL** for your well-being. Manage your health by taking your medications the way you were taught and follow your low salt diet. Stay active and go to your scheduled doctor appointments. If you are unable to manage your health care responsibilities, please call your doctor's office immediately so that a solution can be found.

Ways to help you manage your care include:

- Filling your pill box weekly. Call the doctor's office as soon as your prescriptions are low.
- Keep a food diary by writing down everything you eat during the day and include your salt intake.
- Use a container with measurements to check the amount of your fluid intake each day.

## MONDAY TUESDAY



### **Sexual activity**

Heart failure can affect all areas of your life. It can affect your energy, your desire or the ability to engage in sexual activity.



This does not mean you cannot engage in sexual activity. The amount of work the heart does during sexual activity is the same as that needed to walk up two flights of stairs or walk briskly.

Your sexual desire and the possibility of erection may be reduced based on your health and your medications. Remind your partner that your energy is lower than it used to be.

If you start to have any chest pain or shortness of breath stop immediately. If symptoms do not resolve contact your doctor right away or call 911.

Remember that you cannot take erectile dysfunction drugs such as Viagra or Levitra if you are taking nitroglycerin. They can have dangerous effects such as fainting and low blood pressure, if used together.

### Stress reduction

It is important to reduce your stress level. Try to pinpoint factors causing your stress so that you can work to find a solution. Avoid unnecessary stress. Ask for help and stay socially active. There are several ways to reduce stress.

Some examples include:

- Yoga
- Exercise
- Talking to family, friends, or a counselor
- Meditation and deep breathing



Try to avoid unhealthy coping tools such as smoking, drinking, binge eating or sleeping too much, as these can lead to more stress.

### **Energy conservation**

- Pace yourself
- Switch between difficult tasks and easy ones while resting 15-30 minutes between tasks or activities.
- Plan ahead to avoid rushing have a written plan and take time to 'organize' your day.
- Break work or tasks into steps and then do away with the unnecessary steps.
- With any activity you are doing you should still be able to easily talk at the same time.
- Ask for help from family and friends.



 Take time to recover, refocus and regenerate. Your attitude and emotions affect the way you react to the world around you. Avoid unnecessary worry, irritation or frustration when possible.

### **Vaccinations**

Keep up to date with your vaccinations. Ask your doctor if you are a candidate for pneumonia and flu vaccinations.

### **ONLINE RESOURCES**

### Seton

www.seton.net/quick-links Information on Seton community classes, events, and support groups

### **American Heart Association**

www.heart.org

Resources and information regarding your diagnosis, information about heart failure, dietary advice and education.

### Heartfailure.org

Information regarding your diagnosis.

### Smokefree.gov

Free resources to help you stop smoking, contains a link for a free phone app

### **DASHdiet.org**

Provides in depth information about the DASH diet as well as sample recipes

### **Heart Failure Society of America**

www.hfsa.org/hfsa-wp/wp/patient/
Provides links to information about heart failure

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Seton.net/Heart-Care