

# Success

## *with Heart Failure*

### 3 KEY STEPS



VOLUME NO. 3

CONGESTIVE HEART FAILURE OUTREACH PROGRAM OF EDUCATION (COPE) NEWSLETTER

## Common Medications Used in the Management of Heart Failure

Medications are an important part of your heart failure treatment plan. Although heart failure cannot be cured, medications can help you feel better and some may prevent your condition from getting worse. The common medications used for heart failure belong to five drug groups (or “families”). They are: diuretics, ACE inhibitors, beta blockers, aldosterone antagonists, digoxin, and angiotensin receptor blockers. Within each group there may be several drugs.

All of the drug groups work differently to help your heart pump blood easier. Some medications remove excess fluid while others improve the heart’s pumping ability or blood circulation. To get the best results, most people take a combination of several or all of these medications. Let’s take a closer look at each drug group.

### Diuretics

**Lasix® (furosemide), Zaroxolyn® (metolazone), Hydrodiuril® (hydrochlorothiazide)**

Diuretics, also called water pills, help your kidneys get rid of extra fluid and salt in your body. You will feel more comfortable. It will be easier to breathe and you will have less swelling in your feet, legs, hands and belly.

#### ***How should I take this medication?***

Diuretics can be taken with or without meals.

You will have to go to the bathroom more often especially during the two or three hours after taking the medication. Many people find this inconvenient

when leaving their home, driving, or sleeping. Plan ahead - if you need to leave your home, do so, several hours after taking your diuretic or wait until you return home to take it. It is wise to find out where the bathroom is when you first arrive at a new place. If you are to take your diuretic more than once a day, take your last dose before 4 PM to avoid having to go to the bathroom during the night.

#### ***Are there any side effects?***

All medications can cause side effects. If any side effect continues or becomes worse call your doctor. Some common side effects of diuretics are:

- dizziness or lightheadedness: stand up slowly after sitting. After lying down, dangle your legs on the side of the bed for a few minutes before getting up. If you continue to feel dizzy call your doctor – sometimes this may mean you are losing too much fluid.
- dry mouth: chew gum, suck on ice chips or hard candies. Do not drink more fluids!
- upset stomach: take with food
- muscle cramps or spasms: you may need to have your potassium level checked (see below)

#### ***Other important information:***

Diuretics may cause you to lose potassium. This important mineral is needed for your body to work properly and to keep your heart beating steady. Your doctor will order a blood test to check your potassium level periodically. If it is low, you may be told to eat foods rich in potassium or to take a potassium pill.

Remember to weigh yourself every day to see if you are gaining or losing fluid. Call your doctor or nurse if your weight changes by more than 2 pounds over 2 – 3 days. They may decide to change the dose of your diuretic.

## ACE Inhibitors

**Altace® (ramipril), Capoten® (captopril), Vasotec® (enalapril), Prinivil® or Zestril® (lisinopril) and others**

ACE inhibitors were a major breakthrough in the treatment of heart failure. Not only do they help you feel better, they may help you live longer, spend less time in hospital, and even help prevent your heart failure from getting worse.

ACE inhibitors block the effects of hormones that make heart failure worse. It takes some time for this medication to work so you will not instantly feel better when you start this medication (unlike diuretics). In a few weeks, however, it will be easier for your heart to work and your symptoms will improve. ACE inhibitors are also used to treat high blood pressure and prevent heart attacks. They are effective in heart failure even if you do not have high blood pressure.

### **How should I take this medication?**

Most ACE inhibitors can be taken with or without food. Captopril must be taken on an empty stomach – take it 1 hour before meals or 2 hours after meals.

### **Are there any side effects?**

Most people are able to take ACE inhibitors with few side effects. Here are a few things to watch for:

- dizziness: more common when you begin this medication or when the dose is increased. This gets better as your body adjusts to the medication. See your doctor if you are dizzy for longer than 5 minutes after getting up, or if you are so dizzy that you have difficulty walking. Many other medications for heart failure can cause dizziness. Sometimes spacing them out at different times of the day may help.
- dry cough: ACE inhibitors can sometimes cause a dry, tickly cough. This may go away or it may persist. If the cough is very bothersome to you, see your doctor. Coughing may also be due to worsening heart failure or some other condition, so do not stop this medication on your own.

### **Other important information:**

ACE inhibitors work best when you take the right amount of the drug. Research tells us that if the dose is too low, the medication may not help you as much as it could. Often people start with a low dose and gradually increase the amount to get the full benefit of the medication. This does not necessarily mean that your condition is getting worse.

ACE inhibitors can increase potassium levels in your body. Your doctor will order a blood test to check your potassium level routinely.

**Betaloc® or Lopresor® (metoprolol), Coreg® (carvedilol), Monacor® (bisoprolol), Tenormin® (atenolol) and others**

Beta blockers are also very effective in people with

## Beta Blockers

heart failure. Research shows that beta blockers can help people feel better, live longer, and spend less time in hospital. Beta blockers slow the heart (so your heart can rest more) and lower the blood pressure. Beta blockers are effective even if you do not have high blood pressure.

### **How should I take this medication?**

Beta blockers can be taken with or without meals. Take them at the same time each day.

### **Are there any side effects?**

When you begin this medication you may not feel better, or even a little worse. It takes 3 to 10 weeks for this medication to work. After this time you should feel better. Your doctor will slowly increase your dose so that you can adjust to the medication. During this time you may feel:

- weak, dizzy or lightheaded
- more short of breath
- more tired

See your doctor if any of these side effects become severe. Other possible side effects:

- upset stomach (taking your medication with food can help), diarrhea
- decreased sexual ability

If any of these side effects are bothersome to you, talk to your doctor. Do not stop the medication on your own – stopping suddenly could make you sick!

### **Other Information**

If you have diabetes you may feel different when your blood sugar is low (hypoglycemia). You should test your blood sugar more carefully.

**Aldactone®, Novospiroton® (spironolactone)**

Aldosterone antagonists are used for people with advanced heart failure. The only drug currently available in this group is spironolactone. Research

## Aldosterone Antagonists

shows that this drug helps people feel better, live longer, and stay out of the hospital.

This medication blocks the effects of a hormone called aldosterone. This hormone can make heart failure worse. Spironolactone is also a weak

*(Continued on page 5)*

## Getting the Most of Your Medication

Modern medications can help you to feel better, prevent worsening of your condition, and help you to live a longer, productive life. Because drug treatment of heart failure involves several different medications, it is particularly important to pay very close attention to take them exactly as recommended, and to keep taking them even if you feel better.

### Hints to get the most out of your medications:

#### 1. Take your medications as instructed by your physician and pharmacist.



Your medications are tailored to suit you. Make sure you understand how and when you should be taking your medications. That could make the difference between getting beneficial effects from your medication and having side effects.

#### 2. Pick convenient times of the day to take your medication.

Mealtime and bedtime are great because you usually eat and go to sleep at about the same time each day. Your pharmacist can tell you about how and when a certain medication should be best taken.



#### 3. Use a Medication Organizer.



A weekly or daily medication dispenser can also help you get organized. These containers have a storage place for daily dose times. Depending on whether they are still full or empty, they can

help you remember if you have taken your medication. Talk to your pharmacist if you need help in filling the medication organizer.

#### 4. Use a medication list.

Make a list of all the medication you take and the time of day you take them. Post this in a convenient location such as your fridge to remind you to take your medication. It is wise to carry a medication list in your wallet (next to your



health care card) should you require emergency medical care and are unable to speak. It is also helpful to other healthcare providers. Show it to any doctors, dentists, nurses or pharmacists you receive care from.

#### 5. Ask Questions.



Knowledge is one of the best tools for maintaining your health. To make the right choices you need to stay informed about your condition and medication. Before you start a new medication find out what it will do for you. Learn what side effects may happen and what to do if you get them. Don't be afraid to ask your doctor, nurse or pharmacist for information. They are there to help you. If you do not understand what has been told to you, ask for another explanation.

Written information such as brochures and pamphlets can help answer questions too. Often it is very hard to remember what someone has told you, especially if it was a long time ago. You can refer back to these materials at any time.

#### 6. Get Some Support.

Involve family members and friends in learning about your condition and medication. They can help you to take your drugs correctly and during difficult times.



## Remember Your Study Diary!

When your study coordinator calls you in one month, you will be asked if you needed treatment in the Emergency Department or were admitted to hospital. To help you remember these events please record them in your Patient Diary. Thank you for your assistance with this program.





## Italian Rice Casserole

2 cups	zucchini, sliced	500 mL
1/2 lb	lean ground beef	250 g
1/2 cup	onion, chopped	125 mL
1/4 cup	celery	50 mL
1	garlic clove	1
1/2 tsp	basil	2 mL
1/2 tsp	parsley	2 mL
1/4 tsp	oregano	1 mL
Dash	freshly ground pepper	dash
1 cup	cooked rice, unsalted*	250 mL
1/2 cup	low sodium tomato sauce**	125 mL
1/2 cup	cottage cheese	125 mL
1	egg, beaten	1
1/2 cup	cheddar cheese, grated	125 mL

Cook zucchini in boiling water about 2 minutes; drain well. Fry ground beef, onion, celery, garlic and seasonings till meat is browned. Stir in rice and tomato sauce. Blend cottage cheese and egg. Arrange half of the zucchini slices in a one-quart (1 L) casserole dish. Spoon on meat rice mixture. Spread cottage cheese over meat mixture. Top with remaining zucchini and sprinkle with cheddar cheese. Bake at 350° F (180° C) for 20 to 25 minutes or until hot and bubbly. Makes 4 servings.

### Variations:

\*Substitute rice with 2 cups (500 mL) cooked pasta. Add the pasta as a separate layer before meat mixture and after cottage cheese.

\*\*Substitute tomato sauce with 1/4 cup (50mL) tomato paste (no added salt) and 1/4-1/2 cup (50-125 mL) water.

### Nutrition Information - Per 1 cup (250 mL)

Calories 326, protein 25 g, fat 14 g, carbohydrate 24 g, sodium 161 mg, potassium 651 mg, phosphorus 296 mg.

From “Low Sodium Savvy” by L. Kerr, M. Kennedy, Clinical Dietitians, Nephrology and Renal Transplant Program, University of Alberta Hospital

## Straight From the Heart



At the age of 35, I was diagnosed with breast cancer. Nine years later, following a radical mastectomy, metastasis to the

bones, and the final chemotherapy treatment, I started putting on a lot of weight and experiencing difficulty breathing. During a regular check-up at the cancer clinic, my doctor suspected that my weight gain was actually water retention, and had me admitted to a hospital right away. Following some tests, I was diagnosed with heart failure. My hospital stay lasted 10 days but I was on oxygen therapy for four months. Since that time, I have been taking 4 different medications to control my heart failure. About a year ago, my back pain returned so I had to receive five days of radiation and chemotherapy.

Sometimes I feel really frustrated because I don't have my full strength any more. I also tend to lose my patience quickly. I get tired easily, even just from walking. When I feel unwell, most of the housework gets done by the other members of my family. Last March, my condition reached the point where I was forced to quit my job. This has been the most difficult decision I've had to make. Whenever I feel really frustrated, I visit or call my parents and sisters and spend some time with them. I don't follow a special diet, but because my weight has been decreasing, I started taking *Ensure* (two cans a day). I drink six glasses of fluids daily (water, coffee, juice).

The only advice I can give to other patients with heart failure is to take it easy and enjoy life to the fullest. Live a normal life (don't think about being sick), enjoy the things that you like to do, spend more time with family and friends, take your medication regularly, do your exercise and have regular check-ups.



I am 75 years old and retired. I have had heart failure for about 4 or 5 years. In addition, I suffer from diabetes. Currently, my treatment involves 30 different medications.

My wife is in a very similar medical situation so the changes we had to make to our lifestyle were not so difficult because we made them together. Primarily, we have adopted a much healthier diet. To keep a close eye on my condition, I have got into the habit of weighing myself every morning. I restrict my fluid intake as much as possible. For exercise, I walk and play golf.

Every once in a while I do end up in the hospital. It's a pretty regular occurrence and I tell myself that there's just no getting upset over it. This is simply how it goes with heart failure.

If I was to give other patients any advice about the management of their condition, I would suggest that they see their cardiologist regularly and take all the advice and help that's given to them.

(Continued from page 2)  
diuretic (water pill).

### **How should I take this medication?**

Spironolactone can be taken with or without meals. Take it at the same time each day.

### **Are there any side effects?**

See your doctor if any of these side effects continue or become worse:

- dizziness, weakness
- dry mouth: chew gum, suck on ice chips or hard candies. Do not drink more fluids!
- enlargement or tenderness of the breasts, especially in males

### **Other Information**

You will need to have regular blood tests to check how your kidneys are working and your potassium level. Spironolactone can increase potassium levels.

Digoxin is used for people who are troubled by the symptoms of heart failure even though they are taking other medications we discussed. Research

## **Digoxin**

shows digoxin can help keep people out of hospital due to worsening of heart failure.

Digoxin makes the heart pump stronger. It also slows down the heart rate so that your heart has a chance to rest. Some people take this medication if they have an irregular heart beat.

### **How should I take this medication?**

Digoxin can be taken with or without food. It is very important to take the **exact** amount prescribed by your doctor. Never take **extra** tablets.

### **Are there any side effects?**

Call your doctor if you notice any of these problems:

- nausea, vomiting, diarrhea
- major loss of appetite
- blurred vision or colored vision (yellow, green or white spots around objects)
- weakness, confusion

### **Other Information**

Your doctor may order a blood test to check how much digoxin is in your body.

**Diovan® (valsartan), Cozaar® (losartan),**

## **Angiotensin Receptor Blockers (ARBs)**

**Atacand® (candesartan), Avapro® (irbesartan), Micardis® (telmisartan), Teveten® (eprosartan)**

ARBs have similar actions to those of ACE inhibitors. They block the effects of harmful stress hormones that can make heart failure worse. ARBs may be recommended for people who unable to take an ACE inhibitor.

### **How should I take this medication?**

ARBs can be taken with or without food.

### **Are there any side effects?**

Most people are able to take ARBs with few side effects.

- dizziness: more common when you begin this medication or when the dose is increased. This gets better as your body adjusts to the medication. See your doctor if you are dizzy for longer than 5 minutes after getting up, or if you are so dizzy that you have difficulty walking. Many other medications for heart failure can cause dizziness. Sometimes spacing them out at different times of the day may help.

### **Other important information:**

ARBs can increase potassium levels in your body. Your doctor will order a blood test to check your potassium level routinely.

As you can see, there are several medications that can help you feel better, live longer, stay out of hospital, and prevent your condition from getting worse. However, drugs do not work if you do not take them as prescribed. If you are feeling well you may be tempted to stop your medication. If you stop your medication, it is only a matter of time before your symptoms return. If you are having problems with your medications do not stop taking them on your own – this could be dangerous. Your doctor may be able to switch you to another medication to overcome the problems you may be experiencing.

Always talk to your doctor or pharmacist about your medication. There are many medications that can be purchased without a prescription but some may worsen your heart failure or interfere with your prescribed medication. Be aware that there is no proven benefit of “natural” or “herbal” products in the management of heart failure. If you want to try such a product talk to your doctor or pharmacist first. Some products may change the way your prescribed medication works. Never replace your prescribed medication with a herbal product.

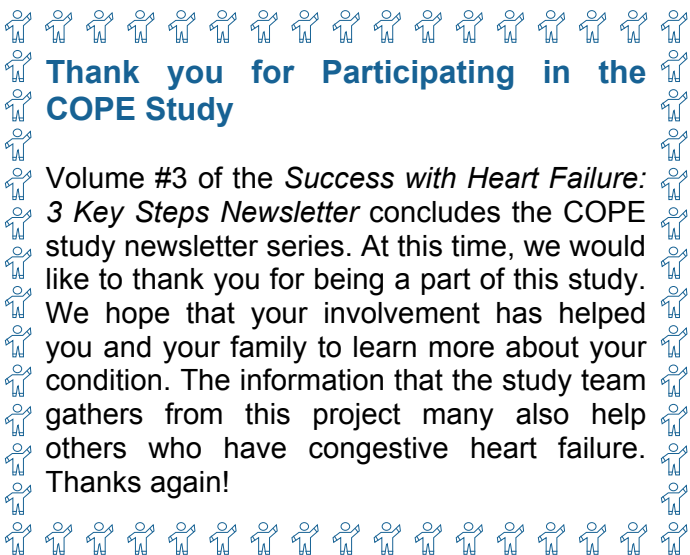




## Caution: SALT AHEAD!

Cheese is a good source of calcium and a tasty treat for many of us. But oh, often so salty! Here is an adapted list from the Low Sodium Savvy Cookbook that will allow you to rate the salt content of your favourite cheese. If you can't find the low salt cheeses at the store, ask your grocer for them.

SODIUM CONTENT per 30 g of cheese			
Very Low	Less than 23 mg	Black Diamond Cheddar Cheese® (unsalted) Quark Cheese® (white, whole milk cheese) Dry Curd Cottage Cheese Kraft®: Gruyere, Unsalted Cheddar & Mozzarella	
Low	Less than 100 mg	Cream Cheese Gruyere Farmer's (Kraft®)	Ricotta Natural Swiss
Moderate	100 to 150 mg	Cottage Cheese Mozzarella, regular (Black Diamond®) Neufchatel (low in protein)	Havarti Port Du Salut
High	150 to 200 mg	Cracker Barrel® Old & Medium "Light" Farmer's (Black Diamond®) Mozzarella, part skim (Black Diamond®) American Swiss Danish Blue Danish Danbo Danish Emmenthaler Danish Gruyere Danish Esrom	Gjetost Marble Brick Brie Caraway Cheddar Cheshire Colby
Very High	200 to 300 mg	Mozzarella, reg & skim (Kraft®) Monterey Jack Limburger Camembert Provolone	Muenster Tilset Edam Gouda
	Over 300 mg	Swiss processed Processed Cheese (spread, food or slices) Parmesan Roquefort	Romano Blue Feta

 Thank you for Participating in the COPE Study

Volume #3 of the *Success with Heart Failure: 3 Key Steps Newsletter* concludes the COPE study newsletter series. At this time, we would like to thank you for being a part of this study. We hope that your involvement has helped you and your family to learn more about your condition. The information that the study team gathers from this project many also help others who have congestive heart failure. Thanks again!

## 3 Key Steps to Success SUMMARY

1. Avoid salt
2. Weigh yourself daily
3. Take your medication

By following these three key steps, you can help yourself to a healthier life.

