

Patient and Family Education

HEART FAILURE

Dear Patient,

This information is not intended to be a substitute for professional medical advice, diagnosis or treatment. Always consult your doctor or healthcare professional for detailed medical advice.

About your condition/procedure

Heart Failure

The heart is a muscle that pumps nutrient-rich blood and oxygen to the body. Heart failure occurs when it is unable to pump effectively to meet the body's requirements. As a result, blood accumulates in the lungs and fluid leaks into other areas of the body.

Symptoms of heart failure include:

- Difficulty breathing on exertion or at rest/lying down
- Swollen ankles, legs or abdomen
- Persistent coughing or wheezing
- Sudden weight gain
- Waking up breathless at night with dry hacking cough
- Tiredness and giddiness
- Palpitation (increased heart rate)
- Loss of appetite or nausea

(Scan the QR code for more information)



Nutrition / Diet



Low sodium diet

- Take less salt as salt causes water retention.
- Meat, fish, milk, vegetables and even water contain a small amount of sodium.
- Also limit salt, soy sauce and other condiments in your food.
- How to reduce salt/sodium:
 - Substitute salt with natural herbs/spices such as ginger, garlic, onion, lemon juice, pepper.
 - Choose fresh meat, fish and vegetables instead of processed and preserved food.
 - When eating out, take less soup/gravy.
 - Read food labels. Choose food with lower sodium content.
 - Consult a dietitian to assist you with your meal planning.

Keep cholesterol under control

- Eat less high-cholesterol foods, such as red meats, organ meats, egg yolks, shellfish, etc.
- Choose healthier cooking oil, such as corn oil, soya oil, sunflower oil or olive oil.
- Replace coconut milk with skimmed milk/ low fat milk for curries and other dishes.
- Trim away visible fats from meats before cooking.
- Eat adequate fibre, especially wholegrains and legumes.
- Aim for 2 servings of vegetables and 2 servings of fruits daily.

Fluid management

- Limit fluid intake to the amount prescribed by your doctor.
- All liquids consumed must be counted in your fluid allowance including solid foods high in water content (examples: porridge and agar-agar).
- Tip: Use a water bottle with measurements. Use a smaller cup to control your fluid intake.

No alcohol intake

- Alcohol can cause further damage to the already weakened heart.
- Patients with heart failure should abstain from alcohol completely.

Safe and effective use of medication



- Remember:
 - **Do not** stop taking your medicine.
 - It is common for your doctor to increase the dose even if you feel better because most medicines work best at certain doses.

Angiotensin Converting Enzyme Inhibitor (ACEI e.g. Captopril, Enalapril, Lisinopril, Perindopril) / Angiotensin Receptor Blocker (ARB e.g. Candesartan, Losartan, Valsartan) / Angiotensin Receptor Neprilysin Inhibitors (ARNI e.g. Entresto – Sacubitril, Valsartan)

- Makes it easier for the heart to pump and reduces blood pressure.
- Improves symptoms and slow disease progression.
- Inform your doctor if you have a persistent dry cough (more common with ACEI).
- Dizziness may occur especially during first few days of initiation or up-titration phase.
- If you feel dizzy, rise slowly from standing, sitting or squatting position. As several medicines may cause dizziness, inform your doctor if the dizziness is unbearable so that he / she can advise you accordingly such as spacing them out at different times throughout the day.

Beta blocker (Bisoprolol, Carvedilol)

- Reduces heartbeat and oxygen consumption. It also lowers blood pressure.
- Helps reduce the risk of hospitalisation.
- Some patients may experience temporary worsening of symptoms like fluid retention or shortness of breath during start of therapy or up-titration phase. These symptoms usually subside with continued use. Inform the doctor if symptoms persist.
- If you feel tired or dizzy, rise slowly from standing, sitting or squatting position. Inform your doctor if dizziness is unbearable.

Aldosterone Receptor Antagonists (Eplerenone, Spironolactone)

- Increases urine, flushing out sodium and slow down disease progression.
- Improves symptoms and outcomes of heart failure, reducing hospitalisation risk.
- Inform your doctor if you experience any breast tenderness with spironolactone.

Diuretic (Frusemide, Hydrochlorothiazide, Metolazone)

- Removes excess water and salt to reduce swelling and improve breathing.
- If you take Frusemide twice a day, take the first dose in the morning and the second dose in the afternoon (after lunch or any time before 4 pm) so you urinate less often at night.
- As diuretics will flush out potassium from the body, blood tests are done periodically to make sure potassium level is normal. Potassium helps ensure a regular heart rhythm. Potassium supplements are usually given together with diuretics.

Digoxin

- Increases the heart's pumping ability and slows your heart rate.
- Seek immediate medical attention if you notice any nausea or vomiting, blurred vision, confusion or abnormal heart rhythm.

Ivabradine

- Slows your heart rate, improves symptoms and reduces risk of hospitalisation.
- You may experience blurred vision or moments of increased brightness, most often caused by sudden changes in light intensity. This is usually mild and temporary. Inform your doctor if symptoms persist.

Vasodilators (Hydralazine plus Isosorbide Dinitrate or Isosorbide Mononitrate)

- This combination of medicines relaxes the blood vessels, increasing oxygen supply to the heart
- Flushes, headaches or giddiness are temporary side effects during initiation or up-titration. Side effects usually diminish with continued use. Inform your doctor if symptoms persist or are unbearable.
- **Do not** take Sildenafil (Viagra), Tadalafil (Cialis) or Vardenafil (Levitra) when you are taking Isosorbide Dinitrate / Mononitrate or Glyceryl Trinitrate (GTN).

Anticoagulant (Warfarin) / Antiplatelets (Aspirin, Clopidogrel, Ticagrelor)

- Commonly known as "blood thinners" that prevent blood clots.
- Seek immediate medical attention if you have tea-coloured urine, blood in stools, black tarry stools, abnormal bruises, nose or gum bleeding.

Lipid lowering agents (Atorvastatin, Lovastatin, Simvastatin, Rosuvastatin)

- Lowers LDL Cholesterol and increases HDL Cholesterol
- Inform your doctor if you experience unusual muscle pain or weakness.

Activity / Rehabilitation



- Avoid lifting/carrying heavy loads (more than 5kg).
- Start with short periods of easy activity, gradually progressing to longer periods of more difficult activities. Plan your day so that your activities are spread out
- Follow your physiotherapist's recommended activity / exercise.
- Vigorous exercises are not advisable. Walking is the safest exercise and it helps to improve your stamina and symptoms.
- If tolerable, start with walking for 10 to 15 minutes, 3 to 5 times weekly.
- Always monitor for symptoms of chest discomfort/pain, dizziness, breathlessness or cold sweat during walks.
- Consult your doctor / physiotherapist before starting other exercises.



Weight Management

- Get a weighing machine.
- Weigh yourself daily after urinating and before having breakfast.
- Record your weight (in kg) daily in a diary.

Adopt a Healthy Lifestyle

- Stop smoking – smoking leads to narrowing of arteries which reduces blood and oxygen supply to the heart. Smoking also increases risk of developing blood clots and stroke.
- Keep stress under control – continuous, unrelieved stress causes your heart to work harder.



Pain Management

- Refer to Patient and Family Education on Pain Management pamphlet given to you.

When and how to seek further treatment



Call **6704 2000** to make an appointment with your doctor at the SKH Medical Centre during office hours, or visit the SKH Emergency Department after office hours if any of these occur:

- Sudden weight gain of 2 to 3kg within few days (Weight increases by 1kg with each extra 1 Litre of fluid).
- Increased swelling of abdomen, ankles, feet and legs.
- Increased shortness of breath especially at night (when lying down) or at rest.
- Loss of appetite with bloatedness.
- Constant dizziness and palpitation.
- Worsening cough.

Call ambulance (995) or go to the Emergency Department **immediately** if any of these occurs:

- Shortness of breath with excessive sweating
- Chest pain (not relieved by Glyceryl Trinitrate (GTN))
- Rapid heartbeat or fainting

For clarification on the above conditions, contact your Primary Physician or the Nurse Clinician in-charge through **SKH General Enquiry hotline at 6930 5000**.

Patient Education Video(s)

Learn how to manage your heart condition by scanning the QR code to watch patient education videos produced by the National Heart Centre Singapore.



Follow up appointments

- Keep your appointment(s) as scheduled, reschedule your appointment as soon as possible if you have missed your appointment.
- For any change of appointment(s), you can do so in the following ways:
 - Manage your appointment(s) on-line
 - Via SingHealth Health Buddy App
 - Call NHCS Appointment Hotline (6704 2000)
 - Email: central.appt@nhcs.com.sg

