

Coping with Heart Failure



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My Targets To Prevent Heart Failure

Fluid Intake



Up to:

_____ litres / day

or

_____ cups / day

Blood Pressure Target



_____ / _____ mmHg

to

_____ / _____ mmHg

Ideal Body Weight Range



_____ Kg

to

_____ Kg

Heart Failure Action Plan

This plan provides a short summary about the signs and symptoms that you should monitor on a daily basis. This plan also provides instructions on what you should do, should you have any issues or symptoms.

	How I feel	What should I do?
I feel well	<ul style="list-style-type: none">• Able to carry out daily activities without any difficulties• No shortness of breath• No new/ increased swelling in legs, ankles or abdomen• No weight gain	<ul style="list-style-type: none">• Continue to take medications as prescribed• Monitor weight and blood pressure regularly• Maintain active lifestyle
I do not feel well	<ul style="list-style-type: none">• Fast weight gain of 2kg in 2 days• Shortness of breath or wheezing with activity or at rest• Difficulty in breathing when lying down• Increased or severe swelling in legs, ankles, or abdomen• Any symptoms mentioned in page 5 associated with the above mentioned symptoms	<ul style="list-style-type: none">• Call the Heart Failure Nurse at 9010 8241 during office hours (Monday to Friday, 8am-5pm)• Adjustment of medications may be needed
I need help now	<ul style="list-style-type: none">• Chest tightness with giddiness• Fainting spells• Difficulty breathing at rest• Persistent low blood pressure (<90/60 mmHg) with fast heart rate (>100 BPM)• Persistent low oxygen saturation (SpO₂ < 92%)	<p>Call 995 immediately</p> <p>OR</p> <p>See a doctor immediately or go to the nearest Emergency Department</p>

Introduction To Heart Failure

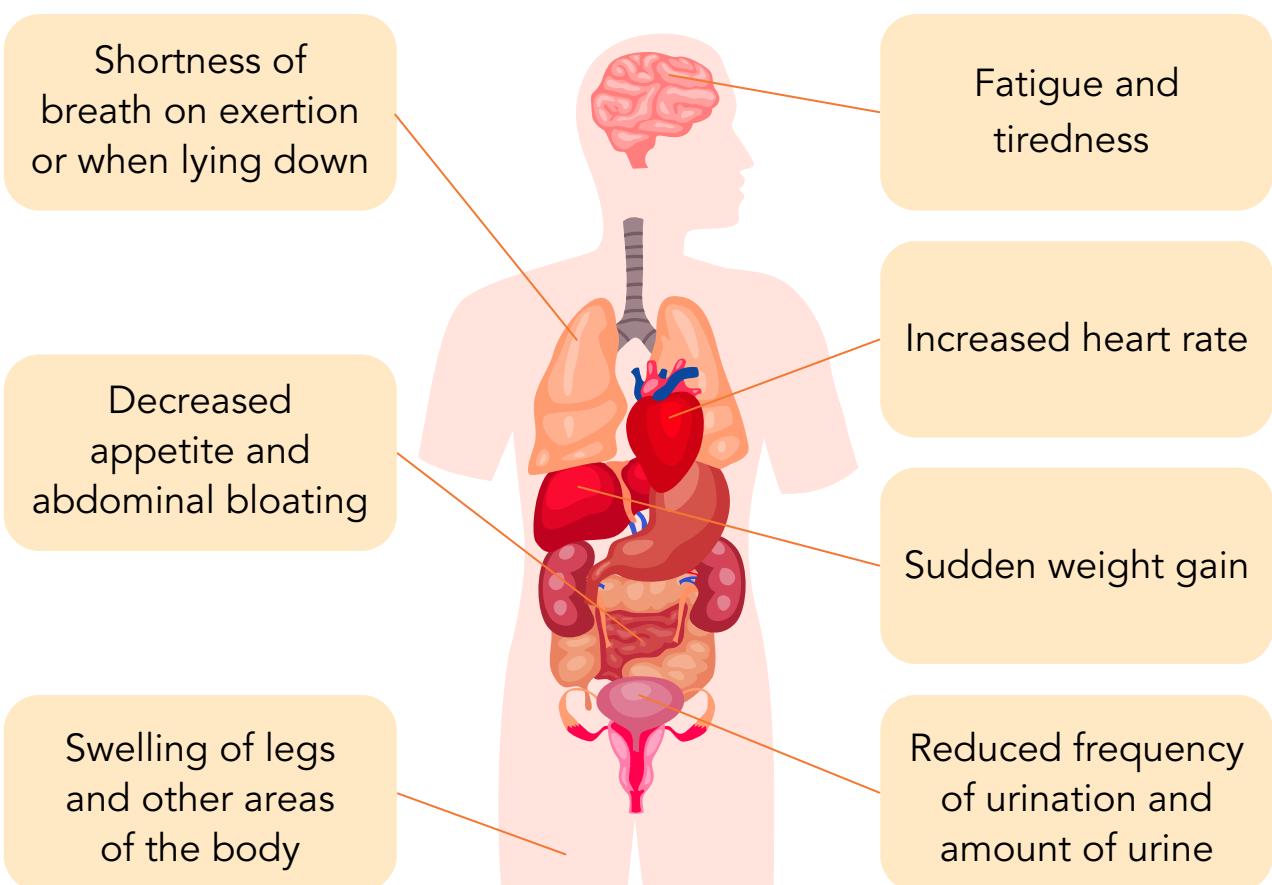
What is Heart Failure?

Heart Failure is a condition where the heart is unable to efficiently pump blood to the rest of the body.

This results in insufficient oxygen and nutrients for normal body functions.

These requirements increase when one is active or exercising.

Symptoms of Heart Failure



What are the Causes of Heart Failure?

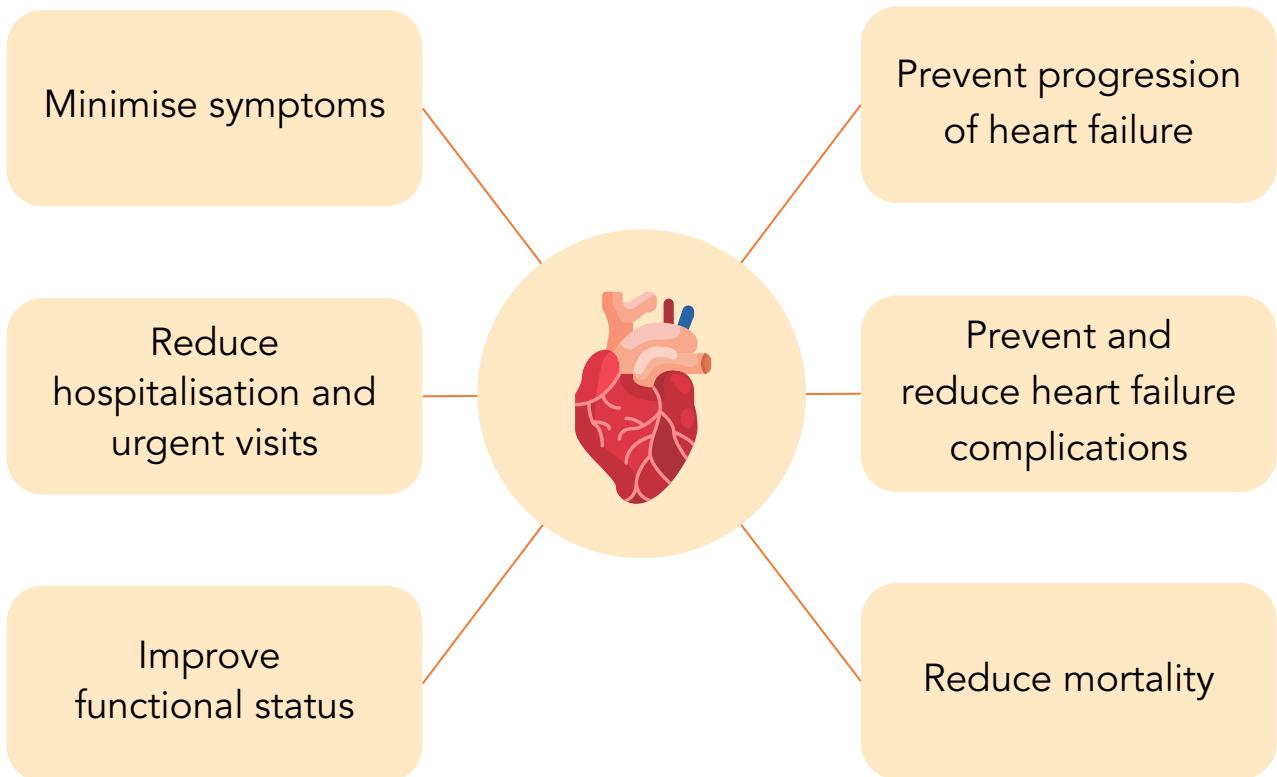
The most common causes of Heart Failure are:

- Coronary heart disease
- Hypertension
- Arrhythmias
- Valvular heart disease

Other contributing causes include thyroid disorders, severe anaemia, infection, diabetes, alcohol, smoking and obesity.

Management of Heart Failure

The Goals of Heart Failure Management



Medical Management of Heart Failure

- Your medication regimen is unique to you.
- Be compliant with your medications.
- There will be continued titration of your medications to achieve maximally tolerated doses to reap the beneficial effects.

Class of Medication	Examples	Favourable Drug Effects	Potential Side Effects
<ul style="list-style-type: none"> Angiotensin-Converting Enzyme Inhibitors (ACE-I) Angiotensin Receptor Blockers (ARB) Angiotensin Receptor-Neprilysin Inhibitors (ARNI) 	<p>ACE-I: Enalapril, Lisinopril, Captopril, Perindopril</p> <p>ARB: Losartan, Telmisartan, Valsartan, Irbesartan, Candesartan</p> <p>ARNI: Sacubitril-Valsartan</p>	<ol style="list-style-type: none"> Lower blood pressure and reduce workload on heart, thereby preventing further strain on the heart Reduces rate of progression of kidney disease 	<p>All:</p> <ol style="list-style-type: none"> Giddiness during initiation or dose changes Swelling of eyes/lips <p>ACE-I:</p> <ol style="list-style-type: none"> Persistent dry cough

Special Notes:

ACE-I:

The dry cough typically appears within 4 to 6 weeks after initiation of the ACE-I. It will resolve after discontinuation of drug. Do inform your doctor if the cough is bothering you.

ARNI:

Follow your doctor's instructions if you are advised to switch between ACE-I and ARNI.

Class of Medication	Examples	Favourable Drug Effects	Potential Side Effects
<ul style="list-style-type: none"> Beta Blockers 	Bisoprolol, Carvedilol, Nebivolol	1. Lower heart rate and blood pressure to reduce heart workload and improve heart function	Temporary Side Effects: 1. Tiredness 2. Giddiness during initiation or dose changes 3. Cold extremities Less Common Side Effects: 1. Erectile dysfunction 2. Risk of precipitating asthma attacks in patients with known asthma

Special Notes:

In patients with diabetes, use of beta blockers may hide symptoms of low blood sugar.

Class of Medication	Examples	Favourable Drug Effects	Potential Side Effects
<ul style="list-style-type: none"> Sodium-Glucose Transporter Protein 2 - Inhibitor (SGLT2-I) 	Empagliflozin, Dapagliflozin	<ol style="list-style-type: none"> Suppress hormones that cause water retention and high blood pressure, thereby reducing the risk of heart and kidney impairment Control sugar levels in diabetic patients 	<ol style="list-style-type: none"> Increased urinary frequency Giddiness Urinary tract infections (e.g. pain while urinating)

Special Notes:

- Ensure good genitourinary hygiene.
- If you are unwell, please stop this medication and consult a doctor as necessary.

Class of Medication	Examples	Favourable Drug Effects	Potential Side Effects
<ul style="list-style-type: none"> Mineralocorticoid Receptor Antagonists 	Spironolactone, Eplerenone	<ol style="list-style-type: none"> Suppress hormones that cause water retention and high blood pressure, thereby reducing the risk of heart impairment Reduce cardiac mortality 	<ol style="list-style-type: none"> Stomach discomfort Increased urination Giddiness Breast tenderness Decreased libido

Special Notes:

To take this medication with or after food to reduce stomach discomfort.

Class of Medication	Examples	Favourable Drug Effects	Potential Side Effects
• Diuretics	Furosemide, Bumetanide, Metolazone	1. Remove excess water from body, to prevent development of heart failure symptoms	1. Muscle cramps 2. Increased urination 3. Giddiness

Special Notes:

- This medication may be adjusted based on your current clinical condition.
- This medication may be prescribed together with potassium replacements, to ensure sufficient potassium levels.
- Avoid taking diuretics after 6pm as it can result in frequent urination at night.

Class of Medication	Examples	Favourable Drug Effects	Potential Side Effects
• Potassium Replacements	Potassium Chloride SR tablet, Potassium Chloride Syrup	1. Replace potassium that are lost through diuretics usage	1. Stomach discomfort

Special Notes:

To take this medication with or after food to reduce stomach discomfort.

Potassium Chloride SR Tablet:

Do not crush the tablet.

Class of Medication	Examples	Favourable Drug Effects	Potential Side Effects
<ul style="list-style-type: none"> • Vasodilators 	<p>Venous Vasodilators: Isosorbide Mononitrate CR, Isosorbide Dinitrate</p> <p>Arterial Vasodilators: Hydralazine</p>	<ol style="list-style-type: none"> 1. Dilates blood vessels which reduces workload and strain on the heart 	<ol style="list-style-type: none"> 1. Headache 2. Giddiness 3. Skin flushing 4. Increase in heart rate

Special Notes:

Nitrates:

- Do not take together with medication used for erectile dysfunction (E.g. Sildenafil, Tadalafil, Vardenafil).
- Should headaches persist, please inform your doctor.

Hydralazine:

Please inform your doctor if you develop the following rare symptoms:

- Butterfly-shaped rash across nose from cheek to cheek (Malar rash)
- Lethargy and generalised malaise
- Easy bruising
- Muscle aches with joint pain and swelling

Class of Medication	Examples	Favourable Drug Effects	Potential Side Effects
<ul style="list-style-type: none"> • Cardiac Glycosides 	Digoxin	<ol style="list-style-type: none"> 1. Improve exercise tolerance 2. Control irregular heart rate 3. Improve heart contractions 	<p>Common Side Effects:</p> <ol style="list-style-type: none"> 1. Nausea and vomiting 2. Diarrhoea 3. Slow heart rate 4. Giddiness 5. Changes in visual perception <p>Severe Side Effects: In addition to above mentioned:</p> <ol style="list-style-type: none"> 1. Life threatening arrhythmias

Special Notes:

- Take this medication with or after food to reduce stomach discomfort.
- Seek medical attention immediately if the side effects are persistent or severe, or if you experience blurring or yellowing of vision.

Class of Medication	Examples	Favourable Drug Effects	Potential Side Effects
<ul style="list-style-type: none"> • β-channel blocker 	Ivabradine	<ol style="list-style-type: none"> 1. Reduce oxygen demand and workload on the heart 	<ol style="list-style-type: none"> 1. Visual disturbances 2. Slow or irregular heart rate

Special Notes:

- Take this medication with or after food.
- Seek medical advice should you experience visual disturbances.

- Medications that lower the blood pressure may cause giddiness when newly started or during any dose changes. Do rise up slowly from a seated or lying position to minimise giddiness and prevent falls. This effect is usually transient and will resolve when your body has adapted to the medication changes. Do inform your doctor if the symptoms persist for more than a week or are affecting your daily activities.
- Seek medical advice if any of your side effects are persistent and intolerable.
- For any newly-initiated medications, please monitor for signs and symptoms of drug allergy, which may include swelling around the eyes, difficulty breathing, or rashes. Should these symptoms develop, please seek medical attention immediately.
- Please inform your doctor if you are pregnant or planning to get pregnant.

Other Steps To Manage Heart Failure

Medication Compliance



Set reminders for your medications.



Do not stop your medication without speaking to your healthcare provider.



Ensure that you have sufficient medications until your next appointment.

Good Control of Blood Pressure and Blood Sugar



Help to reduce the risk of other conditions e.g. heart attack or stroke.



Home monitoring of blood pressure and sugar will allow your healthcare provider to better adjust your medications.

Fluid Restriction



Take your body weight at the same time each day. Follow your action plan if there is a large weight gain.



Items such as soups, porridge, fruits with high water content, and all beverages should be included into your daily fluid requirements.



Small ice chips or frozen fruits may help to quench your thirst. However, do avoid over-consumption.



Use a water bottle or graduated flask to help monitor your fluid intake.

Other Steps To Manage Heart Failure

Engage in Regular Exercise



Regular exercise will help to reduce your cardiovascular risk, manage your weight and improve your mood.

Avoid over-exertion by planning your exercise routine.

Speak to your cardiologist to find out more about Woodlands Health's cardiac rehabilitation programme.

Quit Smoking



Speak to your healthcare provider on smoking cessation.

Weight Loss



Being obese can cause long term heart damage and increase your risk of heart failure complications.

Vaccinations



Keeping up to date with your Influenza and Pneumococcal vaccinations reduces your risk of severe lung infections.

Dietary Modifications



Include more fruits and vegetables in your daily diet.



Choose healthier alternatives such as low sugar and less oil.



Avoid alcohol intake where possible.



Limit your daily intake of salt to 5g or 1 teaspoon.



Avoid sodium-rich food (e.g. gravies, sauces, processed or preserved food, soups).

Frequently Asked Questions

What do I do if I miss a dose?

Take it as soon as possible. However, if the next dose is within **6 hours**, please omit this dose and take the next scheduled dose.

Can I take traditional medicines or other supplements with my heart failure medications?

It is advised to avoid taking traditional medicines and other supplements together as they may affect the effectiveness of your medications, or increase your risk of developing side effects. Do consult your healthcare provider if you are unsure.

Can I stop my medications if I feel better?

Do not stop your medications without consulting your doctor. Failure to take your medications or premature cessation may result in worsening of your condition.



For more information about heart failure,
please scan the QR code.

[https://for.sg/healthhub
-heart-failure](https://for.sg/healthhub-heart-failure)

Information shared is accurate as of April 2024 and subject to revision without prior notice.



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