

Take Control of your  
**Blood Pressure**



**CR**  **I**

*Fighting Heart Disease & Stroke*



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Croí works to improve the quality of life for all through the prevention and control of heart disease, stroke, diabetes and obesity.

Our specialist health team equip people with lifesaving skills; provide rapid access cardiac diagnostics; and develop and deliver innovative cardiovascular health care in the areas of prevention and rehabilitation, helping thousands of people throughout the region make measurable improvements to their cardiovascular health and wellbeing.

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**Publication kindly supported by**



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## Blood Pressure and your body

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High blood pressure has many harmful effects on the body. It increases the risk of having a heart attack or stroke.

By taking control of your blood pressure you can make a positive step towards reducing your overall risk of developing cardiovascular disease.

Ireland has one of the highest incidence rates of Stroke and Coronary Artery Disease in Europe, with one in seven of all Irish adults having high blood pressure. High blood pressure can cause silent damage to the blood vessels and the heart. If left untreated the damage may progress and result in a stroke or a heart attack.

## What is Blood Pressure?

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Blood pressure is the force of blood against the walls of the arteries when the heart contracts. Everyone has blood pressure. While a certain amount of pressure is needed to keep the blood flowing, this pressure can increase if the blood meets resistance in the arteries. Blood flowing through the arteries at high pressure can damage artery walls. If this pressure is persistently high, this is called high blood pressure or "hypertension".

High blood pressure is a sign that the heart and blood vessels are being overworked.

### Blood pressure is recorded as two numbers

- *The "systolic" pressure is the pressure exerted on the arteries when the heart is beating.*
- *The "diastolic" pressure is the pressure present in the arteries when the heart relaxes between beats.*

Blood pressure is expressed as the systolic pressure "over" the diastolic pressure. For example, a blood pressure measurement of 120/80 is expressed as "120 over 80".

## How do I know if I have High Blood Pressure?

A consistent blood pressure reading of 140/90 mmHg or higher is considered high blood pressure.

You may not know you have high blood pressure, as usually there are no warning signs or symptoms. The only way to know if your blood pressure is high, is to have it checked by your GP. **Therefore, it is very important to have your blood pressure checked once a year.**

### Initial assessment:

- Having your blood pressure measured is quick and easy, and can be done by your doctor or nurse.
- Blood pressure is measured using a special instrument called a sphygmomanometer. This involves a cuff being wrapped around your arm just above the elbow, which is then inflated. Automatic blood pressure monitors are commonly used. In these cases the blood pressure reading appears on a small screen.
- Blood pressure is just one of the risk factors for heart disease or stroke, therefore your doctor may decide to do some extra blood and urine tests to identify other risk factors that you may have.

### Repeat assessment:

Most doctors will diagnose a person with high blood pressure on the basis of a number of readings. However sometimes your GP may recommend 24 hour blood pressure monitoring. If so:

- This monitor must be worn for 24 hours and will inflate and check your blood pressure every half hour.
- Your blood pressure will vary at different times of the day depending on your activity levels, therefore it is important to carry out your normal daily activities while wearing the monitor.
- This method of blood pressure monitoring is particularly good for patients who only experience high blood pressure when they visit the doctor's surgery. This is called "*white coat hypertension*". Blood pressure can rise when a person is nervous or anxious.

## What causes High Blood Pressure?

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In the majority of people there is no single clear cause of high blood pressure. However, there are a number of factors that contribute to high blood pressure. These include:

- Family history of high blood pressure.
- Age (as you grow older, blood pressure tends to rise).
- Being overweight.
- A high intake of sodium (salt) in the diet.
- Physical inactivity.
- A high intake of alcohol.
- Ethnic Origin: people from African-Caribbean and South Asian communities have a higher predisposition to developing high blood pressure.

In the remainder of people who don't fit into the above category, high blood pressure can arise as a result of other diseases such as a kidney disease, disorders of the adrenal gland etc.

## What should my Blood Pressure be?

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It is very important to know the recommended target level for blood pressure.

### Target Level

Less than 140/90 mmHg\*

If you have Diabetes, Heart Disease, Kidney Disease, or if you have had a Stroke your doctor may prescribe a lower target level.

To help you track your blood pressure readings please contact Croi for a copy of the 'Safe Heart Card'.



\* These targets are based on European Society of Cardiology Arterial Hypertension Guidelines 2013.

## How can I reduce my Blood Pressure?

Everyone can benefit from taking measures to lower blood pressure. Even if you have a healthy blood pressure you can still take steps to ensure it remains healthy.

The following lifestyle modifications can help significantly lower your blood pressure:

- Maintain a healthy weight
- Stop smoking
- Reduce salt intake
- Drink alcohol in moderation
- Increase fruit and vegetables
- Become more physically active
- Try to manage stress

### Maintain a healthy weight

It is well researched that being overweight can lead to an increased risk of high blood pressure. Maintaining a well balanced diet can considerably reduce your blood pressure. Losing as little as 10% of excess weight can lower blood pressure.

Being overweight is also a risk factor for heart disease and diabetes.

Consult with your GP/Nurse to set realistic achievable goals for weight reduction.

10% weight reduction can lower your BP by 10-20mmHg.

### Smoking can increase your risk of developing high Blood Pressure!

If you smoke, stop! Smoking is another major risk factor for heart disease and stroke. Once you quit, your risk of having a heart attack will be halved within two years. There are lots of different methods to help make quitting easier. Consult with your GP/Nurse to see what is suitable for you.

### Reduce your salt intake

If everyone in Ireland reduced salt intake by half a teaspoon (2.4 grams per day), this could prevent approximately 900 deaths each year from stroke and heart disease.

People in Ireland take too much salt and this is directly linked to high blood pressure. It is the sodium in salt that affects blood pressure.

### ***Tips for cutting down on your salt intake***

- Do not add salt to your food at the table.
- Avoid adding salt to food while cooking.
- Cut down on processed foods that are generally high in salt.
- Try flavouring your foods with pepper, spices or herbs as alternatives to salt.
- Sea salt, rock salt, garlic salt and table salt all have the same sodium content.

Many food labels show the sodium value, rather than the salt value. To calculate the salt value multiply the sodium value by 2.5.



### **Increase your intake of fruit and vegetables**

High blood pressure can be reduced by following a healthy eating plan that is high in fruit and vegetables. Adults should eat at least 5 pieces of fruit and vegetables every day. Buy lots of fruit and vegetables in a variety of colours.

Fruits and vegetables have been significantly proven to help prevent diseases such as heart disease and stroke.

For more information on healthy eating contact Croi for a copy of *The Balanced Guide to Healthy Eating* booklet.





## Drink alcohol in moderation

Excessive alcohol consumption is associated with high blood pressure. It can harm the liver, brain and heart. Many people find that their blood pressure improves when they decrease their alcohol consumption.

Alcohol is measured in units. The recommendations for both men and women are shown below.



### Men

Maximum 17 units over 7 days



### Women

Maximum 11 units over 7 days

## 1 UNIT OF ALCOHOL



½ pint of beer



a small glass of wine (100ml)



1 pub measure of spirits

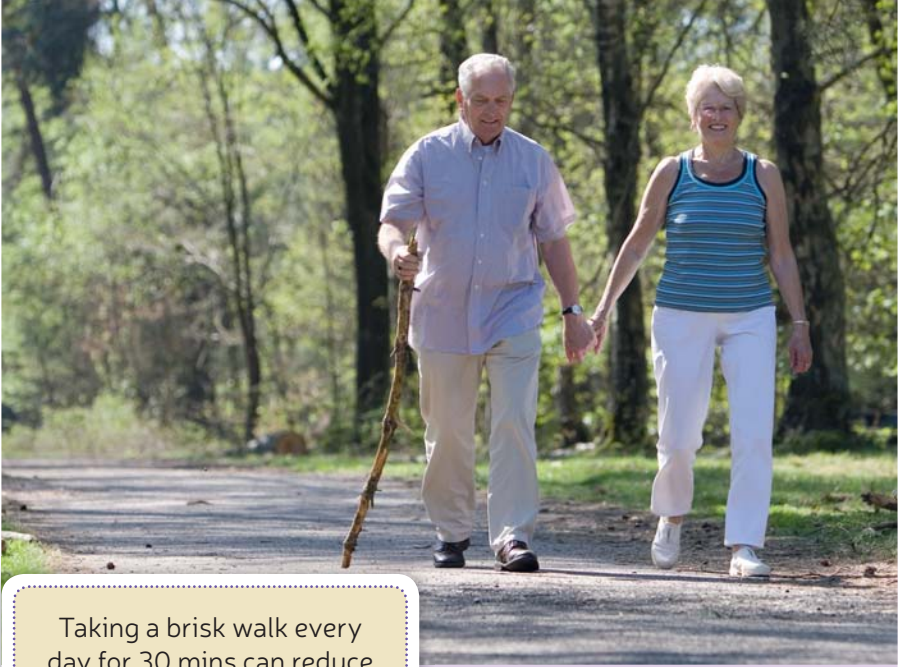
## Become more physically active

Being physically active is one of the most important steps you can take to prevent or control high blood pressure. It also helps to reduce your overall risk of heart disease. Aim for a minimum of 150 minutes of moderate intensity aerobic activity per week. One way of achieving this is a 30 minute brisk walk 5 days per week.

### Tips for being more active:

- 1 Use the stairs instead of an elevator.
- 2 Get off the bus one or two stops earlier.
- 3 Park your car at the far end of the car park.
- 4 Remember any activity that leaves you warm and slightly out of breath is good!





Taking a brisk walk every day for 30 mins can reduce your BP by 4-7mmHg.

## Try to manage your stress

Anxiety and stress may raise your blood pressure in the short term. This is a normal response and healthy blood vessels can cope with these changes. However, if your blood pressure is raised for long periods of time due to stress, this will eventually damage the walls of your arteries.

Try to develop methods of coping with stress that you can practice anywhere, a way of “switching off” for 5-10 minutes. Relaxation exercises can help to release brain chemicals that act as your body’s natural brain tranquilizers, helping to lower blood pressure, heart rate and anxiety levels.

## Blood Pressure medications

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If lifestyle changes alone are not effective in keeping your blood pressure controlled, it may be necessary to combine these changes with taking blood pressure medications. Once you have been prescribed medication, you normally have to take this medication for life.

When prescribing medication your doctor has a large selection of blood pressure medications to choose from. While there is no one drug better than another, your Doctor will prescribe the medication most suited to you based on your medical history.

Blood pressure medications have few side effects and if they are to occur, they will usually happen in the first few months of taking them. If you think you are experiencing side effects or if you have any concerns about your medication it is important to discuss these with your GP immediately, as there are alternative options.

Remember, do not stop taking your medication without seeking the advice of your doctor.

For some people blood pressure can be difficult to control and therefore it not unusual to have your medication dose adjusted or to have to try several medications before you find the one that works for you. Your blood pressure medication may also be changed to a generic brand, which has the same ingredients and works in the same way, but is less expensive.

For blood pressure lowering medication to be most effective, you must continue to make lifestyle changes.

It is important to understand your medication, so please take time to read the patient information leaflet with your medications and to discuss any queries that you may have with your GP, Nurse or Pharmacist.

## Advice for taking your Blood Pressure medications

- Take the medicines exactly as prescribed by your doctor.
- Take your medication regularly and at the same time every day.
- Make sure you do not run out of tablets.
- If you are going on holidays, do not forget to bring your medication. Always carry your medication in your hand luggage just in case your luggage gets lost!
- Always keep a list of your medication in your wallet.
- Do not stop taking your medication without consulting with your doctor first.
- If you develop a reaction or an allergy to your medication, contact your doctor immediately.



For more information on blood pressure medication, please contact Croi for a copy of the 'Advice for Patients on Heart Medications' booklet.



Fighting Heart Disease & Stroke

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I am happy to receive information from Croí by: (please tick)  Email  Phone  Post

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All donations of €250 or more in a year (€21 per month) are eligible for tax relief at 31%, increasing the value of your gift at no additional cost to you.



*Fighting Heart Disease & Stroke*

Croi is a not-for-profit charity dedicated to fighting heart disease and stroke in the region. We are an independent organisation, totally funded through our own fundraising activities and voluntary contributions. We are at the heart of communities working with people to make sustainable and life-changing improvements to their cardiovascular health and wellbeing; supporting patients and their families, teaching the lifesaving skills of CPR; and providing health professionals with the knowledge and skills to translate best evidence into daily preventive care.

### **Your donation can be sent:**

**By post:** Croí Heart & Stroke Centre  
Moyola Lane, Galway

**Online:** [www.croi.ie](http://www.croi.ie)  
**By phone:** 091 544310

Our donors, supporters and volunteers continue to give generously of their time and resources. We are deeply grateful for this support and endorsement of our mission. Using this generosity to the best benefit in a meaningful and measurable way is central to everything we do. Croí adheres to the Code of Governance for Charities and the Statement of Guiding Principles for Fundraising. All personal information provided is held in accordance with the Data Protection Acts 1988 and 2003.

**Registered Charity CHY 7500**

## Useful Information

[www.croi.ie](http://www.croi.ie)

[www.cancer.ie](http://www.cancer.ie)

[www.indi.ie](http://www.indi.ie)

(Irish Nutritional and Dietetic Institute)

Irish Cancer Society smokers quitline  
1850 201 203

**For more information on how to maintain a healthy lifestyle  
please see Croi's other educational publications:**

*Cholesterol "Get the facts"*

*The Balanced Guide to Healthy Eating*

*Advice for Patients on Heart Medications*

*Risk Factors for Heart Disease and Stroke*

*Safe Heart Personal Record Card*

**This booklet has been designed to help you understand blood pressure  
and is not intended to replace the medical advice of your doctor.**



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