



help yourself to

reduce the risk of high blood pressure



Get active — and cut the pressure!

If you've been advised to look at ways of lowering your blood pressure then this leaflet will help you.

The links between high blood pressure and physical inactivity are clear: becoming more active can be one factor that contributes to a lowering of your blood pressure.

We'll show you here exactly how it all works, and precisely what you need to do to achieve immediate health benefits.

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What is blood pressure?

Your blood circulates from your heart to all the parts of your body and back again, then round again ... and back again. To do this, it needs to be 'powered' by the heart creating 'pressure'.

Two things affect blood pressure:

- the volume of blood your heart is required to pump to keep various body parts working
- the width of the tubes through which the blood flows (your arteries).

Blood pressure is measured by two numbers expressed in 'millimetres of mercury' (mm Hg):

- the higher number = pressure while the heart **contracts** – this is **systolic** pressure (e.g. 120 mm Hg)
- the lower number = pressure when the heart **relaxes** between beats – this is **diastolic** pressure (e.g. 80 mm Hg).

In general, it is believed that it is best to try to keep blood pressure around the level of 120/80 mm Hg. Your level may be slightly above this but not considered a problem – for example up to 139/89 mm Hg. Any levels above this are classed as high blood pressure or 'hypertension'.

The more often your heart beats and the narrower your arteries are (for example, they may be restricted or partly blocked by fatty deposits), the higher your blood pressure will be and the harder your heart will have to work to pump the same amount of blood.

Why can high blood pressure be a problem?

High blood pressure can contribute to a number of problems:

- it can cause damage to the heart
- it tends to speed up the process of the narrowing of the arteries (which in turn raises blood pressure again)
- it can result in a higher risk of having a stroke
- it can damage some important organs in the body, like kidneys and eyes.

What is the link between physical activity and blood pressure?

Research shows that people who exercise regularly have lower blood pressure than those who do not. It is estimated that being active can cut your risk of developing high blood pressure by up to 30%.

There are thought to be two connected reasons for this:

- active people are physically 'fitter' meaning that they need to circulate less blood to carry oxygen around the body compared to those who are inactive
- activity leads to a more 'open' circulatory system that allows blood to be pumped more easily around the body.



It is believed that being physically active can reduce systolic blood pressure by between 4-9 mm Hg. Physical activity can have an **immediate** effect in reducing your blood pressure. Lasting effects can be expected after as little as three weeks. With regular and on-going activity, you can expect to see a lower and more stable blood pressure within three months.

Who should be active?

So long as activity is moderate, it is normally safe to increase your physical activity even if you already have high blood pressure and are taking medication for it. But certain conditions will mean you need to consult your doctor for advice first:

- if you have **very high** blood pressure
- if you have a known heart condition
- if you have had damage to any of your major **organs**.

If you experience any of the following symptoms whilst being active, it is essential that you **contact your doctor immediately**:

- any discomfort in your chest or upper body
- uncomfortable breathlessness
- dizziness
- fainting during or just after physical activity
- a very fast or irregular heartbeat (palpitations).



The bigger picture

The factors that shape heart health in general and blood pressure in particular are many and varied. It is therefore important to see activity as only **one part** of any effort to improve the health of your heart. A number of other actions will require attention.

- Physical activity may also need to be supported by appropriate anti-hypertensive (high blood pressure) drug treatment.
- Alongside being more active, it is important to reduce the level of fat and salt in your diet, keep within recommended alcohol intake levels and increase the amount of fresh fruit and vegetables you eat. These actions can cut systolic blood pressure by between 2-8 mm Hg.

Reducing blood pressure is just one part of improving the health of your heart. Other actions can support this, like stopping smoking, replacing saturated with polyunsaturated fats and increasing the amount of oily fish you eat.

Active lives: how increasing your physical activity levels helps you

Being active not only contributes to lowered blood pressure. There are other benefits.

- It can help control body weight.
- It can help build stronger bones.
- It can help you feel generally stronger, fitter and more flexible.
- It can improve your mood, energy and feeling of 'well-being'.

How much and how often?

This is what everyone needs to know: 'Adults should accumulate (build up) at least 30 minutes of moderate activity on most days of the week.' Physical Activity Task Force, 2003.

'Moderate activity' means something like brisk walking. You don't need to sweat or push yourself to exhaustion. Moderate activity should allow you to pass the 'talk test' — keeping up a conversation while you're in action.

Encouragingly, researchers feel that 'moderate' activity (working at between 40-70% of your maximum) results in reductions in blood pressure that are the same or even greater than those achieved via more vigorous activity. Also, those 30 minutes don't have to be done all at once — two brisk walks to and from work, or the bus stop, at the beginning and end of each day might well add up to half an hour.

Don't stop there!
You can get additional
health benefits by:

- being active for more than 30 minutes
- being active every day, and not just on 'most' days
- increasing the intensity of your activity — such as walking or swimming faster.

Action stations: ideas to try

get on down and dance!

Boogie-ing to the latest chart hits is something you can do at home. Or take a dance class in ballroom, jive or salsa, or Scottish country dancing. Look in the local *Yellow Pages* for information.

'The best thing about dance classes is the social side — but doing it three times a week means I'm increasing my physical activity as well. In the spring and summer months, I like to walk the mile or so to and from the studios.' Rose, 70.

Hint: don't be shy or embarrassed. Dancing's brilliant for getting your body really working, but you need to do more than bob about ... start moving!

walking back to happiness

Brisk walking is best — walk as if you are late for an appointment. You need to:

- feel slightly warmer
- breathe a little faster
- feel your heart beating a little faster.

A short and gentle stroll is pleasant, but you need to aim for a little bit more, in order to have an impact on your health. Build up your walking, and try to become more active each day.

'My blood pressure was higher than normal and my doctor recommended taking up some physical activity before putting me on medication — which would have been the next step. I decided to get out for twenty minutes every lunchtime for a walk rather than sitting at my desk. Not only did it give me more energy for my afternoon's work, it relieved any build up of stress and after a month or two my blood pressure was normal — I don't even need medication!' Ann, 37.



Hint: explore local walks in your area — there could be a number you don't know about. Check out Paths to Health for local walking projects in your area (<http://www.pathsforall.org.uk>; tel. 01259 218855).

in the swim

Most swimming pools have adult classes if you need to learn or to improve in order to enjoy swimming. Find out class details by calling locally, or at Scottish Swimming <http://www.scottishswimming.com>.

'I somehow missed out on learning to swim, so as soon as I found out that not being active could affect my blood pressure I went to classes — before that I'd never given it a thought. Now, I go three times a week when the pool is empty, early in the morning. It really makes a difference.'
Robert, 63.

Hint: if your child or grandchild is taking part in classes, offer to take him or her, and use that time for a swim on your own. Track your speed and aim to improve over time.



cycle-logical!

Cycle to work or to the shops, or choose trail or mountain biking to explore the countryside. For information, go to <http://www.forestry.gov.uk/forestry/recreation>.

Remember to wear a well-fitted cycle helmet.

Cycling Scotland can give you more ideas, and put you in touch with contacts in your area. Local cycle campaigns can be useful. Go to <http://www.cyclingscotland.org> for links and contact numbers.

Hint: build up from short journeys to longer ones — and try hills once you start making more progress.

Break through the barrier: making time for activities

Lots of us are busy with work and family. But making time to care for your well-being needs to get a look-in somewhere!

It may help to schedule regular times for your activities to get into the habit.



- Getting up early enough makes the most of spring and summer mornings — try a brisk walk with the dog or get the bike out.
- Half an hour in the early evening is a good time — go outside with a ball for a kick-about with your children or grandchildren.
- Weekends can be the best time for trying out new activities — plan ahead and find out from your partner or the rest of the family what they'd all like to try, and select each idea in turn.
- Fixing a regular time for a walk or a swim with a friend makes it more likely you'll keep the date.

'It worked for me!'

Ailsa in Ellon, Aberdeenshire, is 33. She was told by her doctors a year ago that her blood pressure was 'sky high'. Tests ruled out any underlying condition and she was advised to become more active to bring it down, and to lose weight.

'I started to swim three times a week, and I followed an exercise video at home two or three times a week, too. I aimed to walk to the shops — about twenty minutes each way — when I could. I also had to watch my diet as eating healthily also helps control blood pressure. It only took a month to see my blood pressure going down, and after about three months it was within normal levels.'

Ailsa has continued her more active life and healthier diet and has her blood pressure checked every month. It remains normal.

Remember:

- try to gradually accumulate (build up) 30 minutes' moderate activity on most days of the week
- pick something you enjoy to ensure you keep it up
- stay in touch with your doctor if you're advised to.

Moving on: ideas, inspiration and information

<http://www.cyclingscotland.org>

<http://www.forestry.gov.uk/forestry/recreation>

<http://www.pathsforall.org.uk>

<http://www.scottishswimming.com>

Other leaflets in the *Active Living* series:

- *Get You and Your Family Moving*
- *Help Yourself to Lose Weight*
- *Keeping Active During and After Pregnancy.*

Contact your local health promotion department.

Translations and other formats of these materials are available.