

The Half-Hour Health Huddle



Rayleigh & District
Primary Care Network



High Blood Pressure (Hypertension)

Mariam Shirvani

Physician Associate

BSc, MSc, PGCert Medical and Healthcare Education

GP Healthcare Alliance on behalf of:

Audley Mills Surgery
Church View Surgery and The Jones Family Practice
Downhall Park Surgery
Greensward Surgery
Riverside Medical Centre
William Harvey Surgery



GP Healthcare Alliance
PCN support

DISCLAIMERS

- This presentation has been designed to provide a general overview of hypertension. Please consult with a healthcare professional (e.g. GP/pharmacist) regarding individual care queries
- The information discussed today is aligned with current national guidance, which is constantly subject to change
- Please respect confidentiality



What is Hypertension?

- 1 in 3 adults have high blood pressure
- ½ people are not diagnosed or receiving treatment
- 50-80% do not take all their prescribed medication

(Blood Pressure UK, 2021)



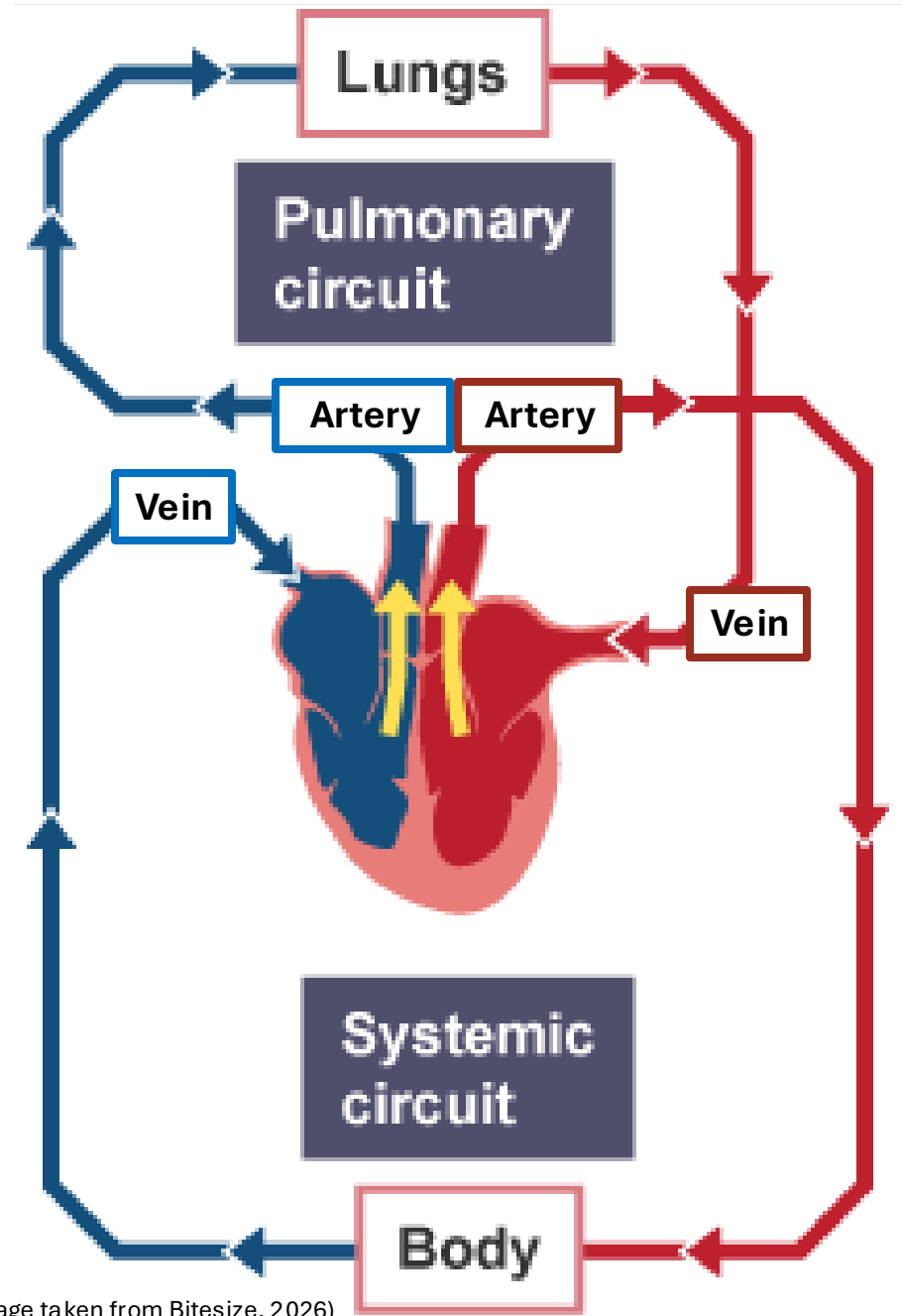
The Cardiovascular System

1) Heart (pump)

- Squeezes (contracts) and relaxes

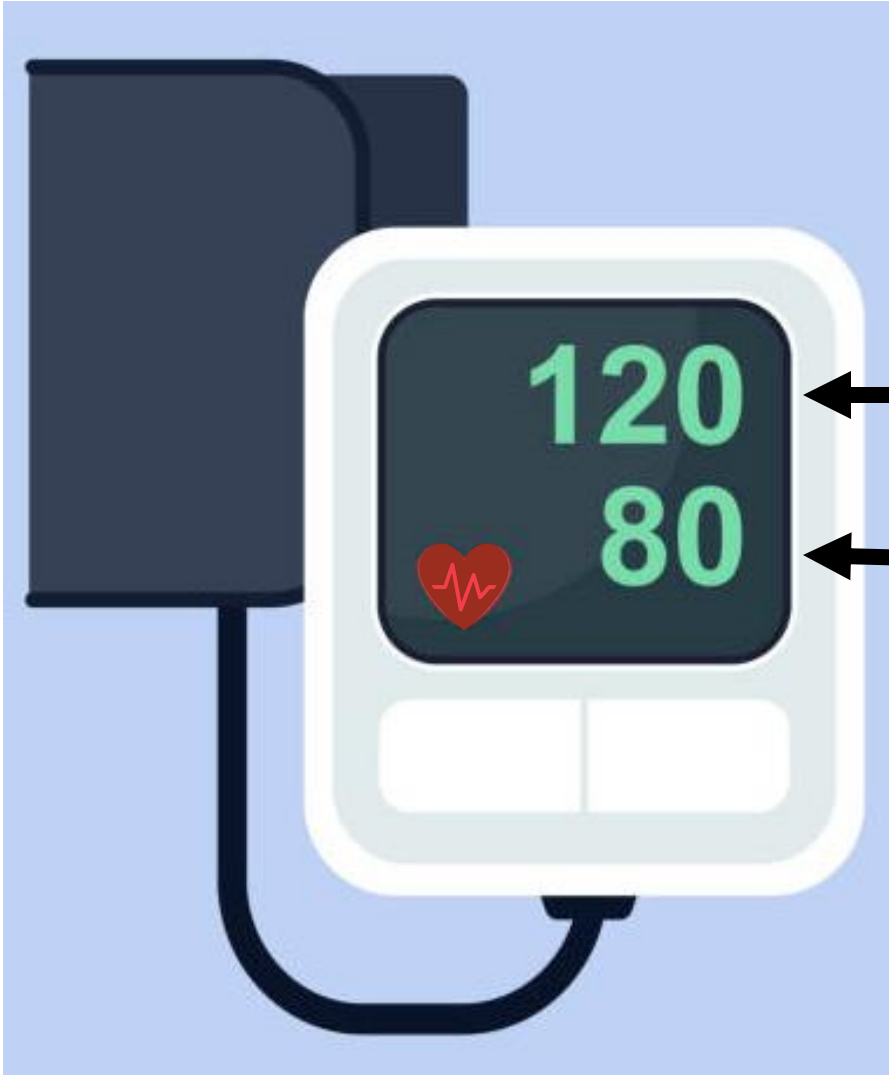
2) Blood vessels

- **Arteries pump blood Away from the heart,** veins pump blood back to the heart



(Image taken from Bitesize, 2026)

Blood Pressure



- Pressure (mmHg) in the arteries when the heart is:

1) Squeezing (top number/systolic)

2) Relaxing (bottom number/diastolic)

- Blood pressure constantly changes depending on activities performed

(Image taken from iStock, 2026)

How to Measure Blood Pressure (BP)

1 BEFORE MEASURING



empty
bladder



no caffeine
/ cigarettes



5-minute
rest



remove
tight clothing

2 PROPER POSITIONING



silent

take 2-3 readings,
1 minute apart

3 CORRECT TECHNIQUE



cuff on bare skin
1 inch above elbow

4 COMMON MISTAKES



crossed
legs



unsupported
arm



talking /
using phone



cuff over
clothing

5 KEEP A RECORD

DATE	AM	PM

Take:

- Lowest reading
- Twice daily for
- 7 days

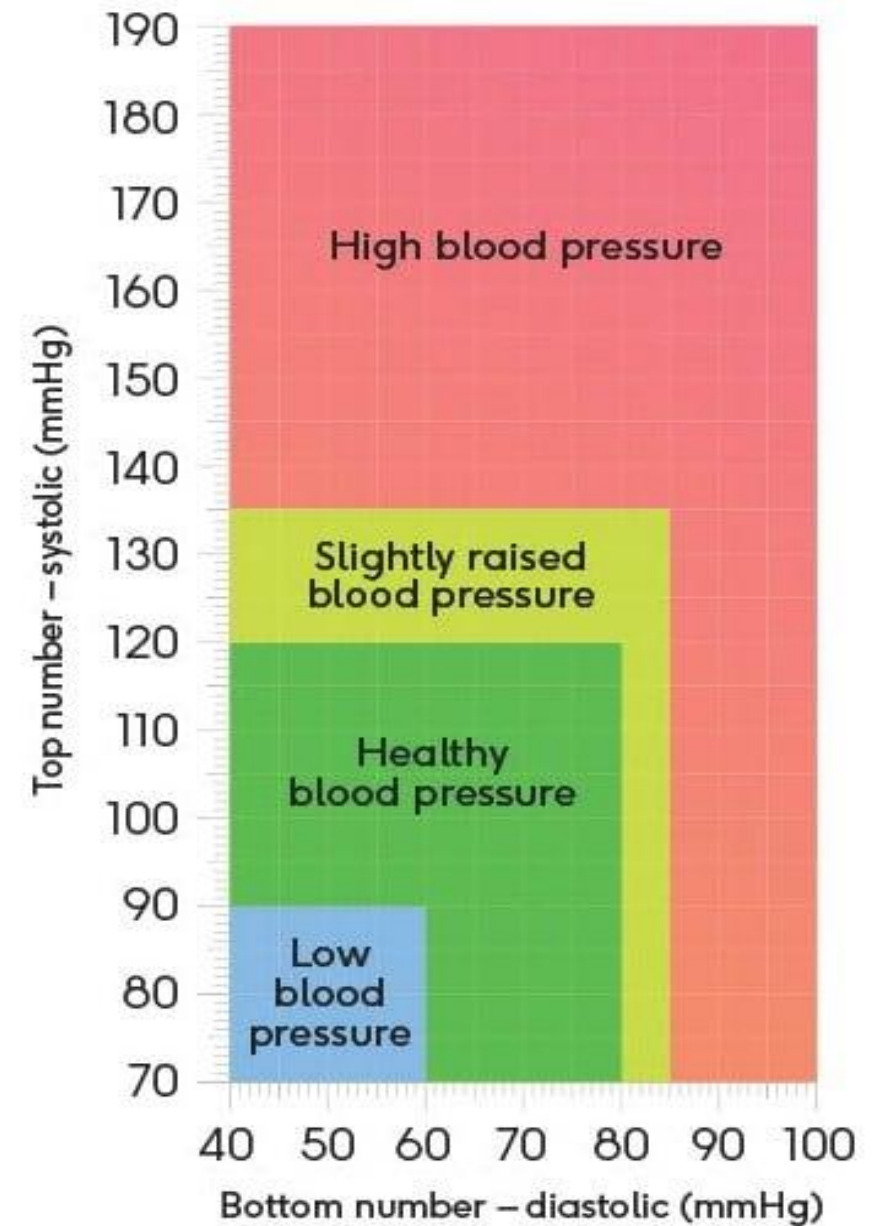
Automated blood pressure machines may not accurately measure blood pressure if you have atrial fibrillation (irregular heart rate)

(Image adapted from Dr Babak Metabolic Clinic, 2025)

Defining High Blood Pressure

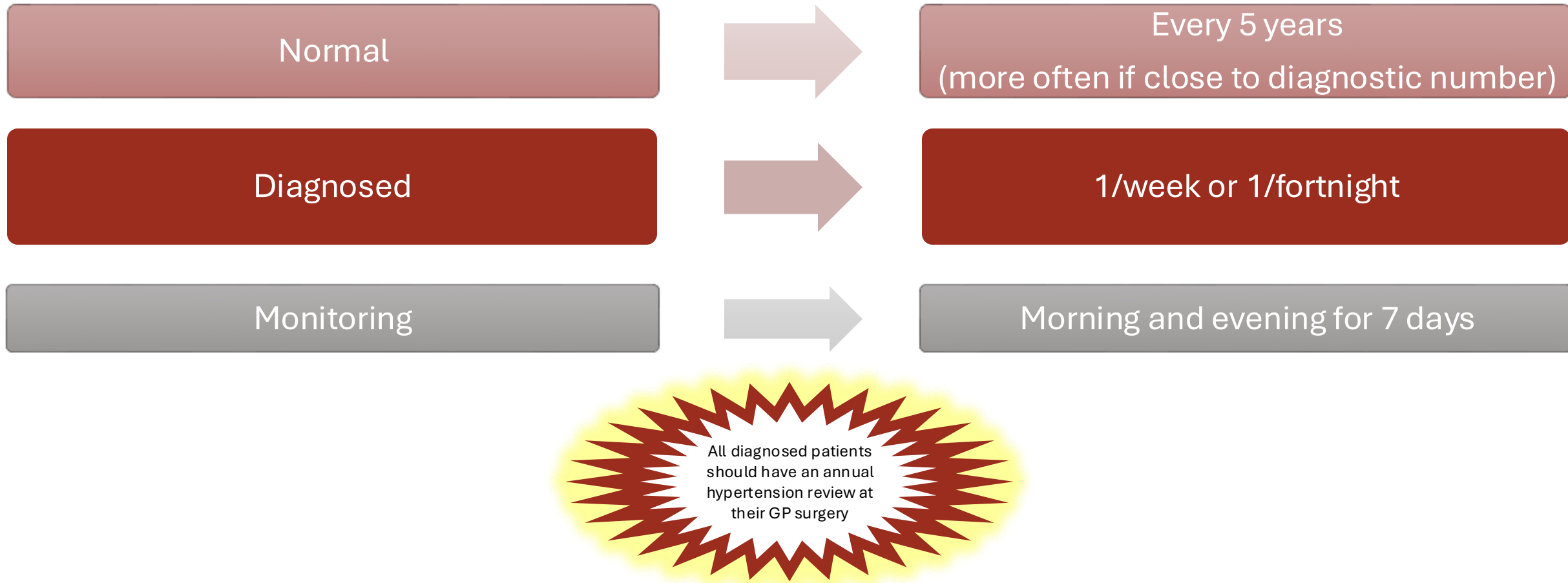
- Home blood pressure readings:

	Under 80 Years	Over 80 Years
Stage 1	Over 135/85	Over 145/85
Stage 2	Over 150/95	
Stage 3	Over 180/120 SAME DAY URGENT MEDICAL ATTENTION VIA 111/A&E	



(Image taken from British Heart Foundation, 2025)

How often to Measure Blood Pressure



Where to Check Blood Pressure Locally



(Image taken from Freepik, 2026)



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(Image taken Borrás, 2020)

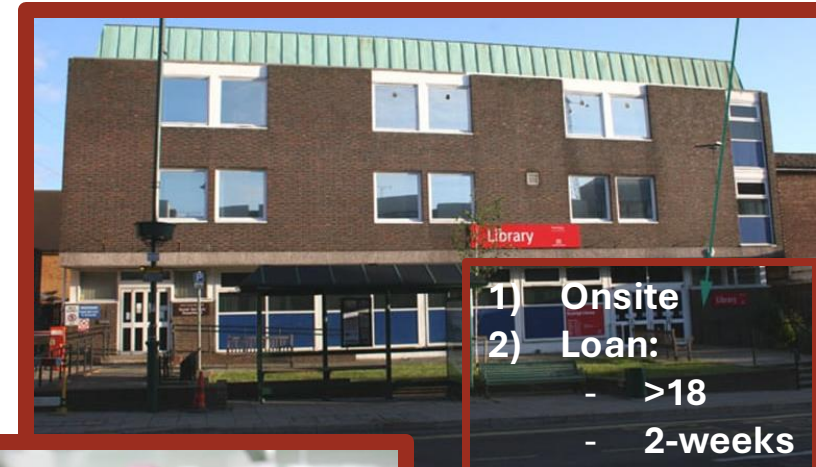


(Image taken from Enfield Dispatch, 2024)

>40



(Image taken from McDonald, 2021)



- 1) Onsite
- 2) Loan:
 - >18
 - 2-weeks

(Image taken from Essex County Council Libraries, 2026)

Causes

- 1) Primary (90%): no identifiable cause
- 2) Secondary (10%): identifiable cause
 - Chronic kidney disease (most common)
 - Pregnancy
 - Drugs/Alcohol
 - Medication e.g. anti-inflammatories
 - Foods e.g. liquorice



HYPERTENSION

PRIMARY

What happens?

Overtime, blood vessels become stiff, and resistance within the arteries increases, leading to a gradual rise on blood pressure

Causes:

- Increased age
- Family history
- Increased weight
- Smoking
- Inactivity
- Diet: high intake of salt, fat, cholesterol

SECONDARY

What happens?

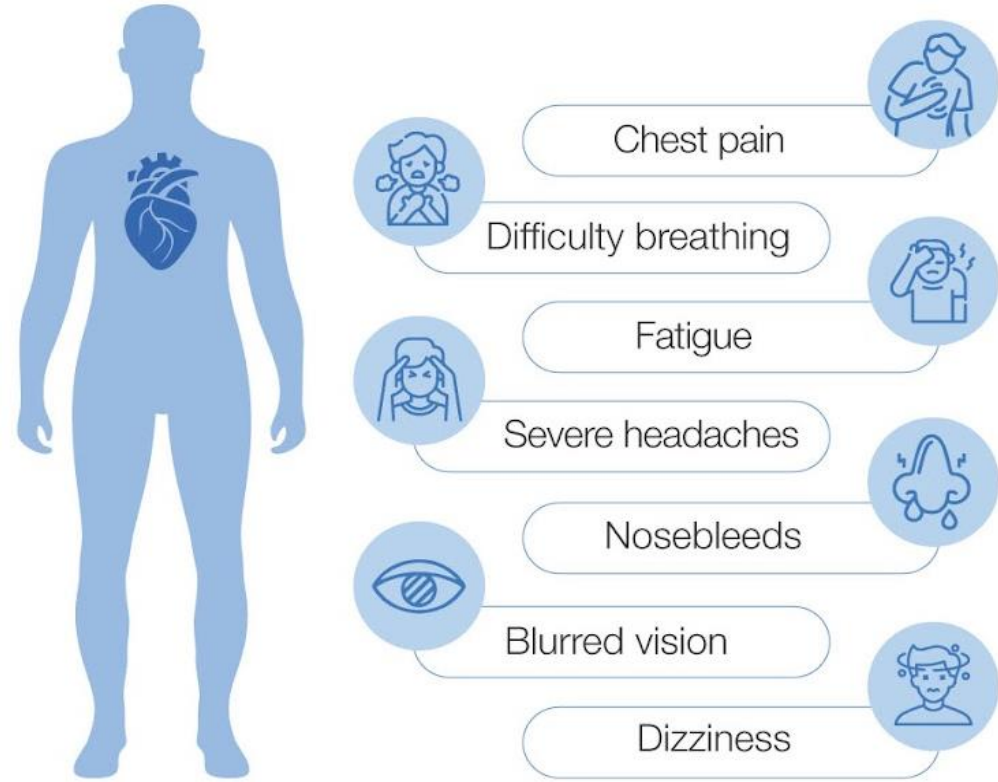
Underlying condition i.e. kidney disease affects the blood pressure regulation, leading to secondary hypertension

Causes:

- CKD / renal artery stenosis
- Diabetic neuropathy
- Pregnancy
- Cushing's syndrome
- Pheochromocytoma
- Hyperaldosteronism

(Adapted from Mikaye, 2026)

Severe cases:



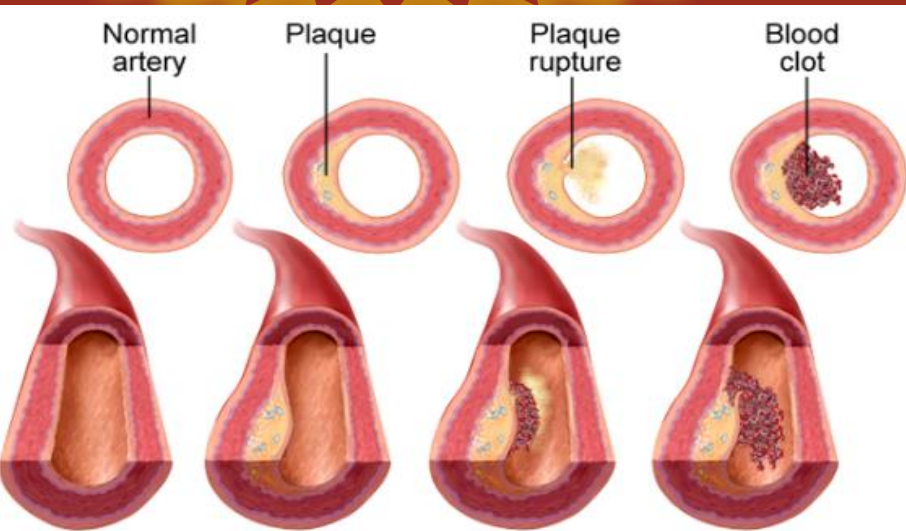
(Taken from Manipalhospitals, 2024)

Symptoms

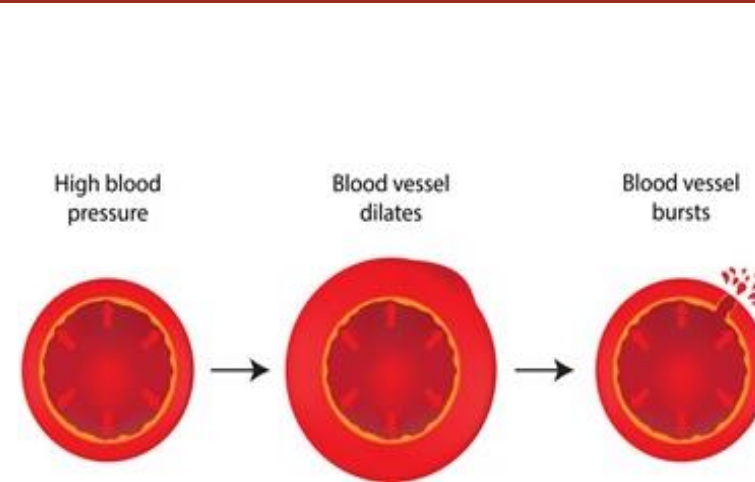
THE SILENT KILLER

Complications

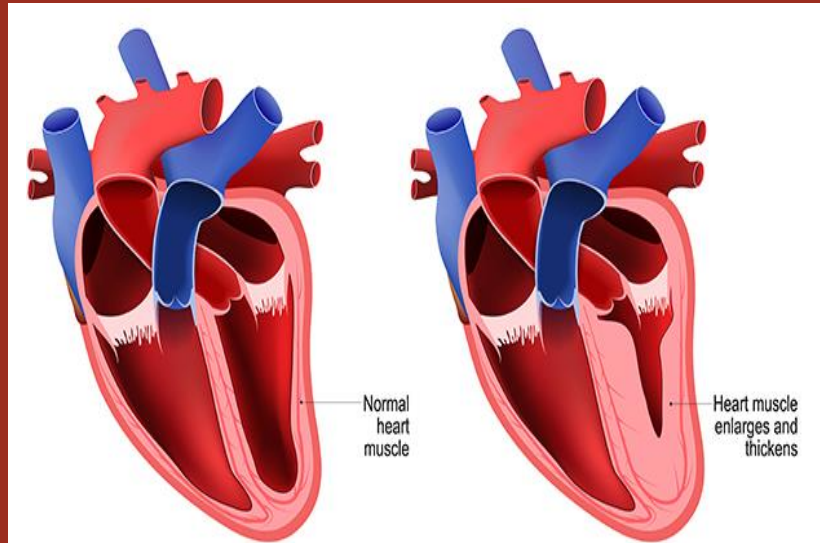
More than half of all heart attacks and strokes are associated with high blood pressure



(Taken from Medmovie, 2026)



(Adapted from Tampa General Hospital, 2026)



(Taken from OHSU Knight Cardiovascular Institute, 2026)

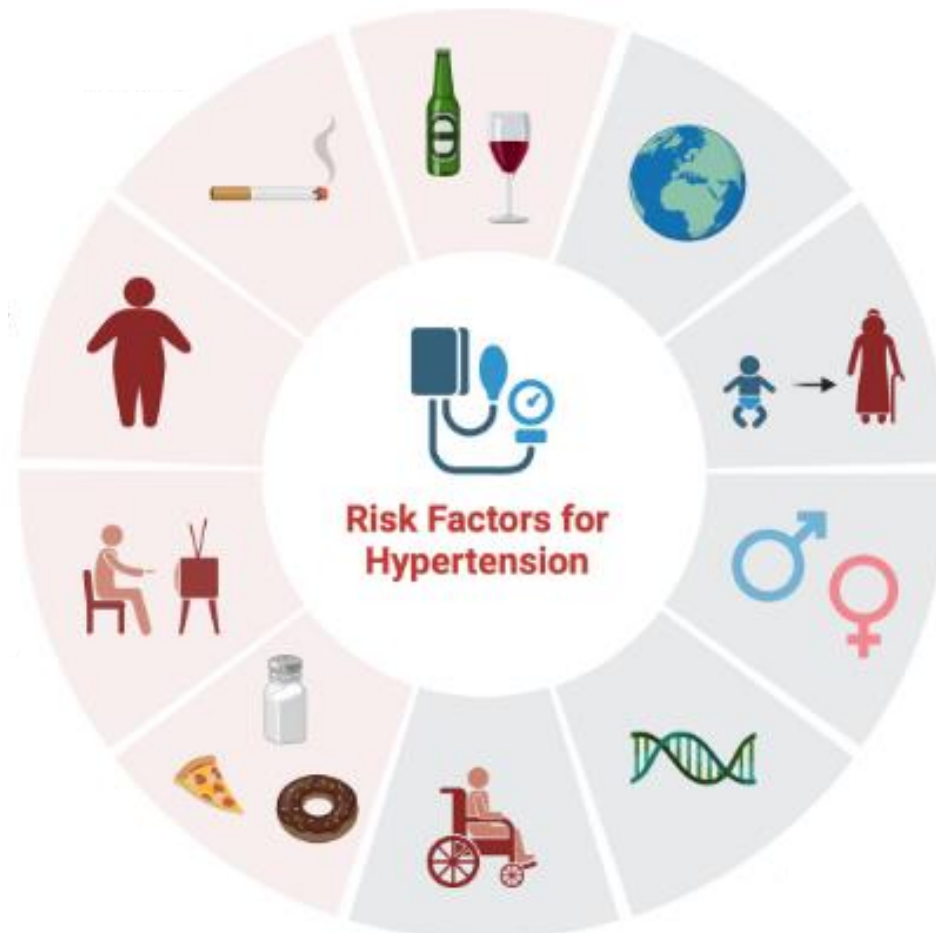
- Angina/Heart attack
- Stroke
- Peripheral arterial disease (PAD)
- Chronic kidney disease (CKD)
- Eye disease/blindness
- Vascular dementia
- Sexual dysfunction

- Stroke
- Abdominal aortic aneurysm
- Eye disease/blindness

- Heart failure
- Atrial fibrillation

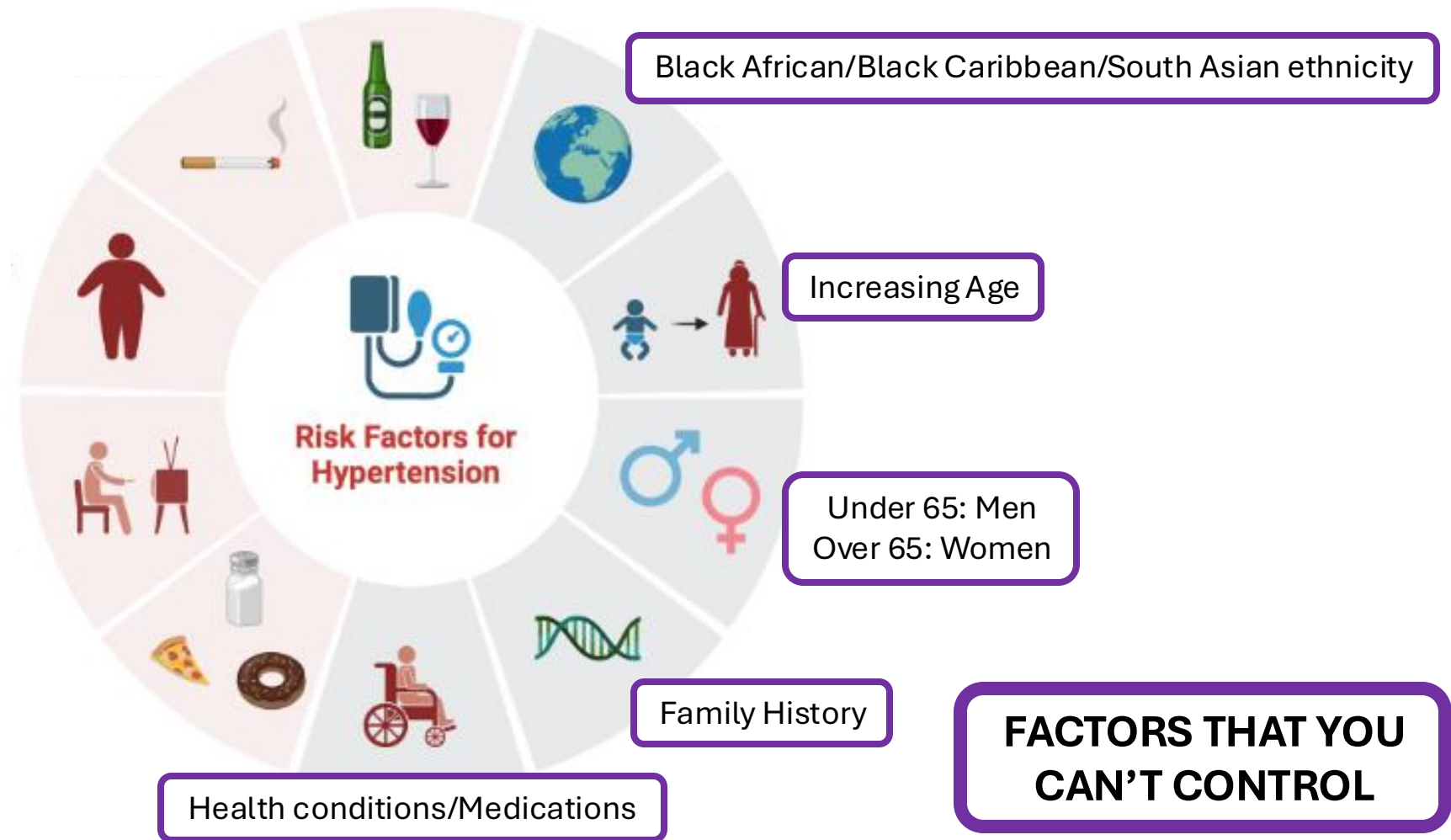
REDUCING THE SYSTOLIC
NUMBER BY 10 mmHg
REDUCES THE RISK OF
MAJOR CARDIOVASCULAR
EVENTS by 20%

Risk Factors



(Adapted from Zeicu et al. 2025)

Risk Factors



(Adapted from Zeicu et al. 2025)

Risk Factors

FACTORS THAT YOU CAN CONTROL

- Stress
- Lack of sleep

Smoking

Excessive alcohol

Obesity

Inactivity

Diet

Health conditions/Medications

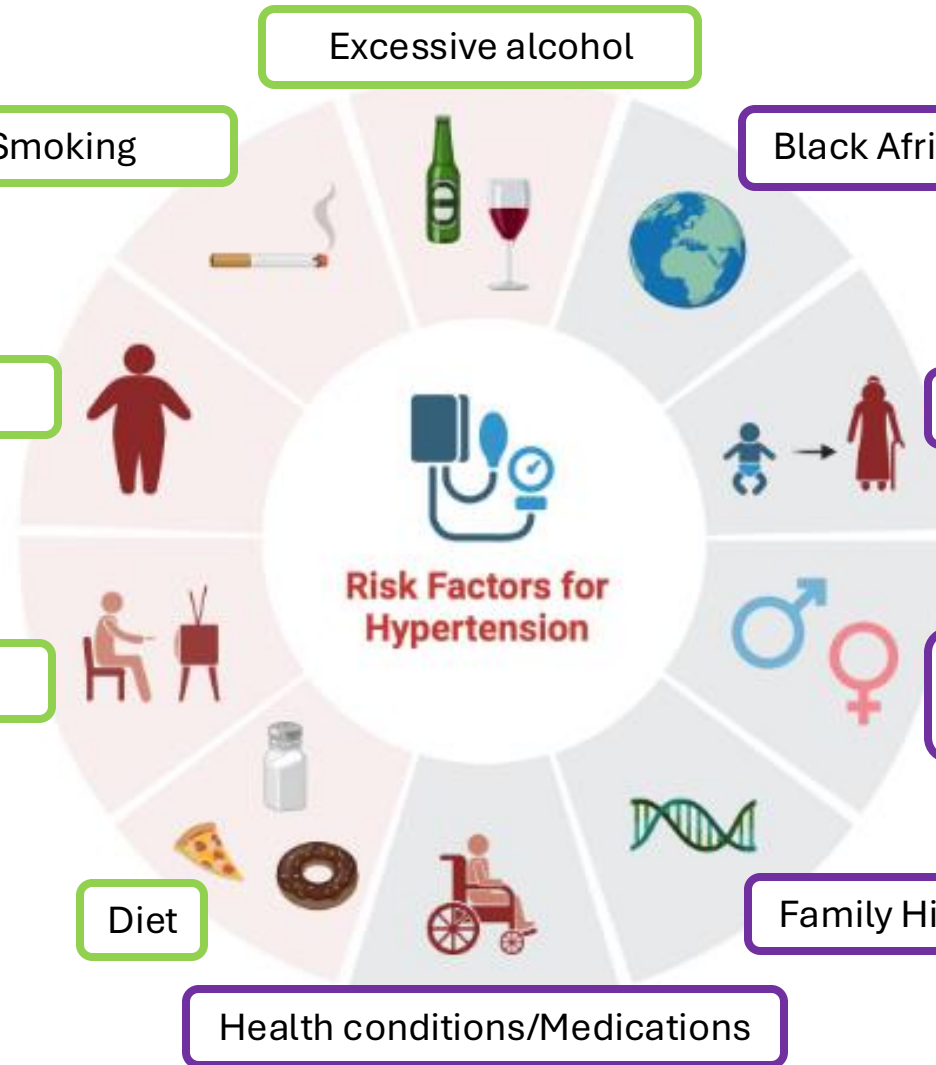
Black African/Black Caribbean/South Asian ethnicity

Increasing Age

Under 65: Men
Over 65: Women

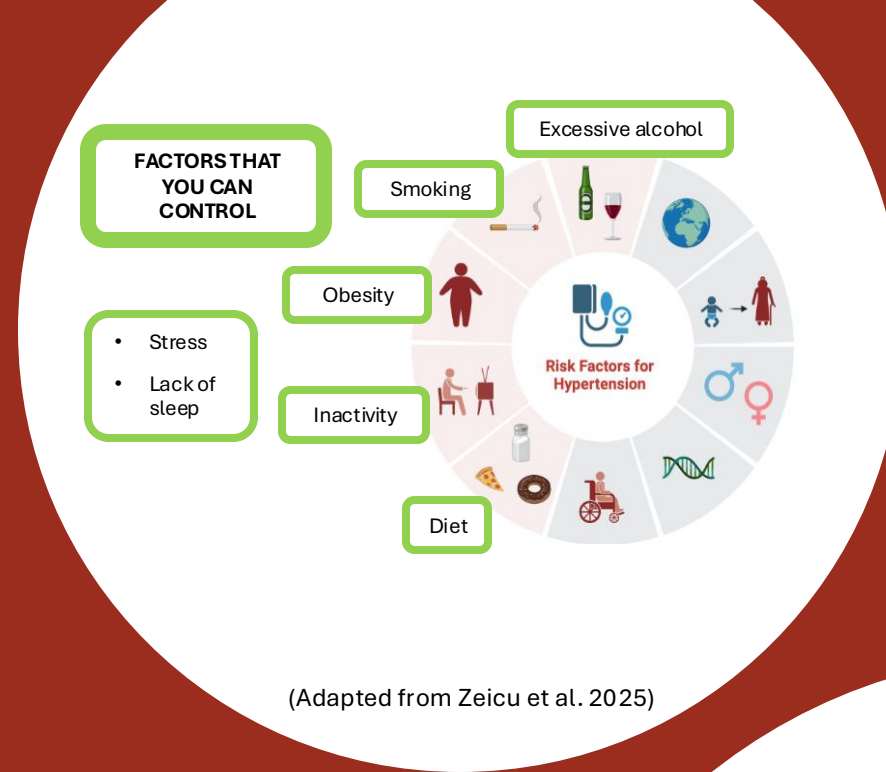
Family History

FACTORS THAT YOU CAN'T CONTROL



(Adapted from Zeicu et al. 2025)

Management



(Taken from TCTMD, 2020)

WHAT IS EXPECTED FROM YOU



Taken from Vecteezy, 2026

6 Pillars of Lifestyle Medicine



Health Eating



Physical Activity



Sleep



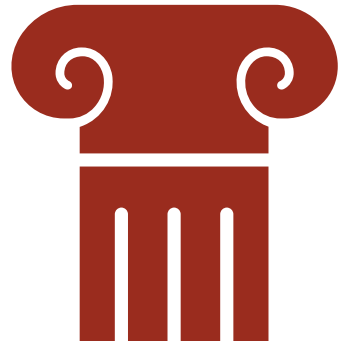
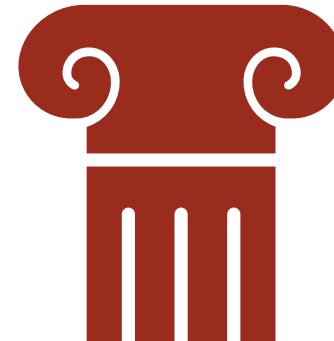
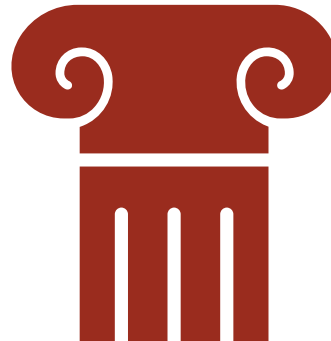
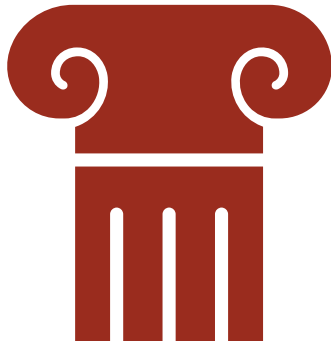
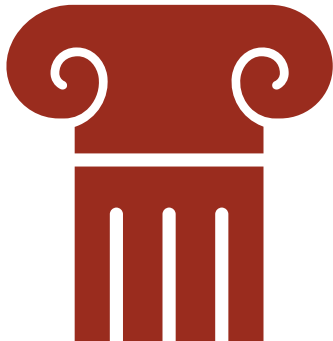
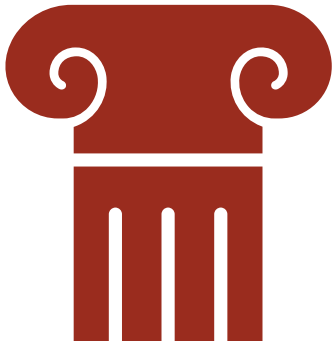
Mental Wellbeing

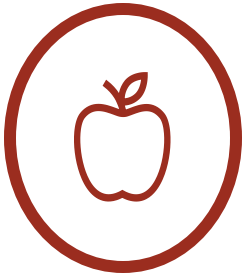


**Healthy
Relationships**

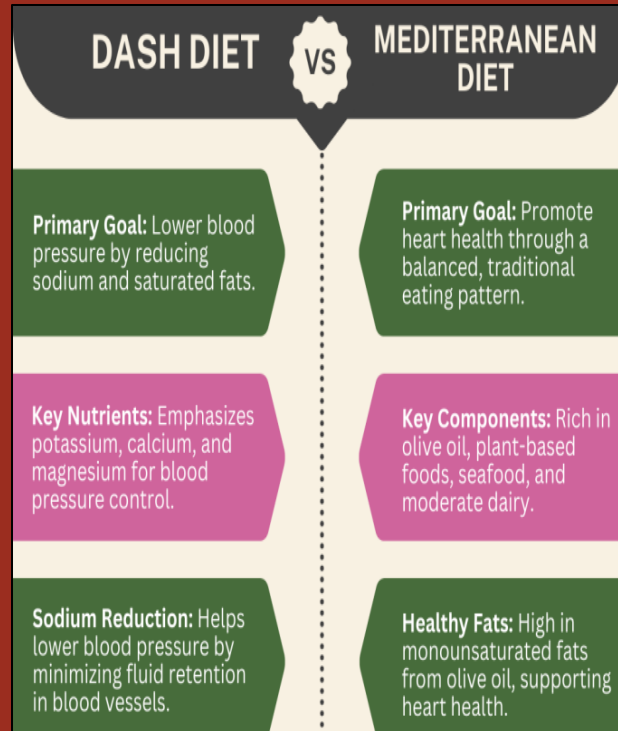
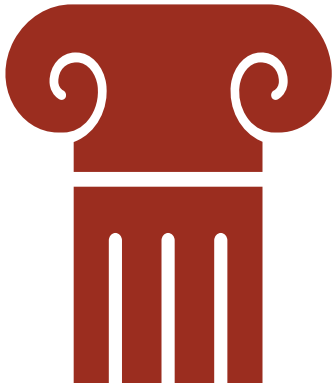


**Minimise
Harmful
Substances**





1) Healthy Eating



(Taken from Accessible Wellness, 2026)



- Limit salt intake to <6g/day (1 teaspoon)
- Avoid caffeine

- Fruit and vegetables: high in potassium, magnesium, calcium and fibre
- Low-fat dairy: contains sources of calcium
- Wholegrain: high in potassium, magnesium and fibre
- Oily fish: omega-3 fatty acids

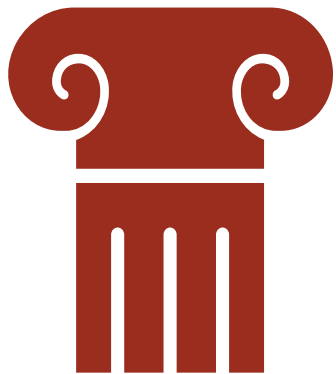
Do **NOT** take supplements without consulting with a healthcare professional

E.g. potassium can affect the heart rhythm

It is specifically dangerous for people that are taking certain blood pressure tablets or have heart/kidney problems



2) Physical Activity



How much physical activity should you do?

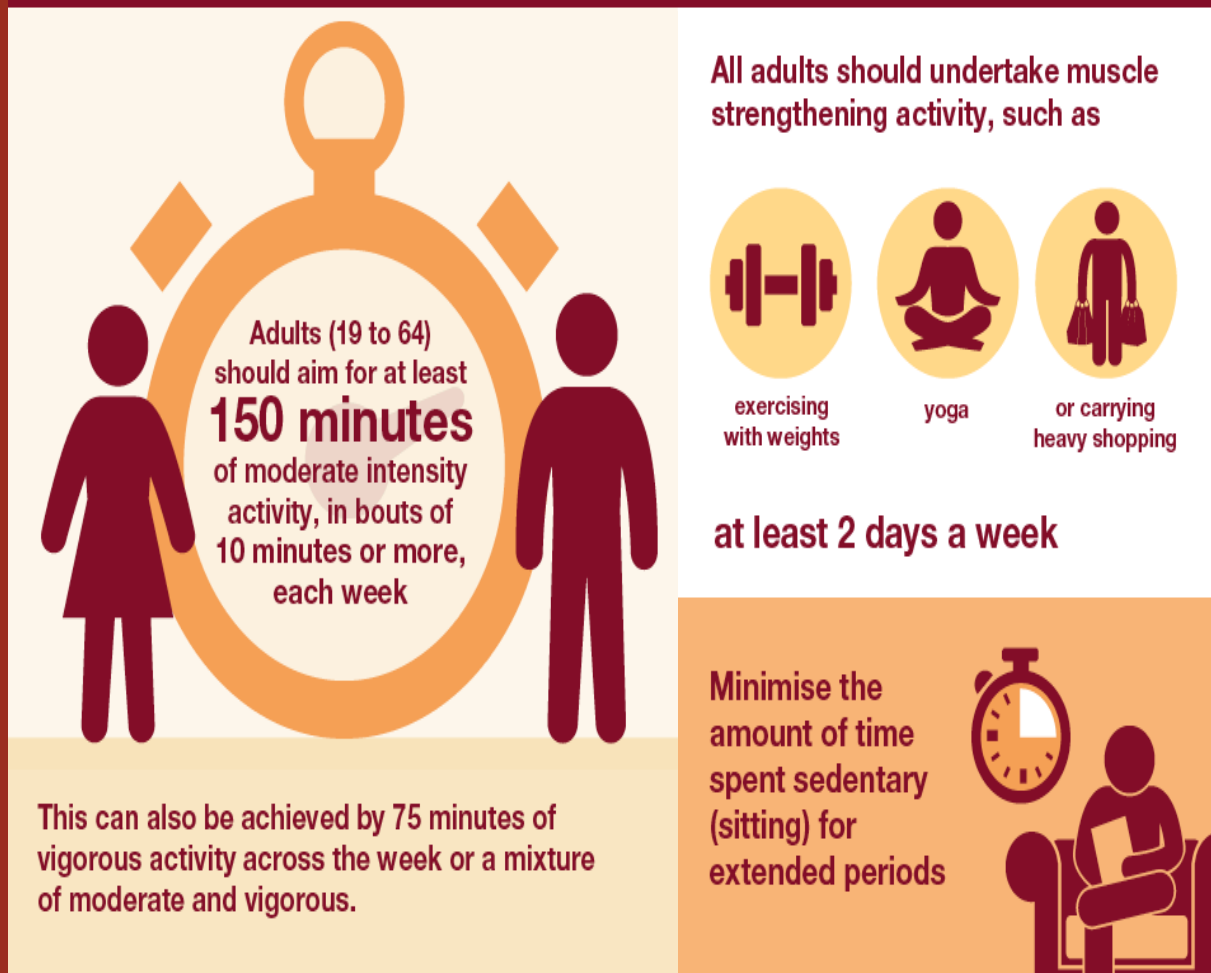


Image Taken from Public Health England, 2016

Moderate Activity

'You can talk, but not sing'

e.g. walking/cycling/pushing a lawn mower

Vigorous Activity

'You can't talk without pausing for breath'

e.g. running/swimming/football

There are free local wellbeing walks and seated exercises available through Rayleigh library



3) Sleep

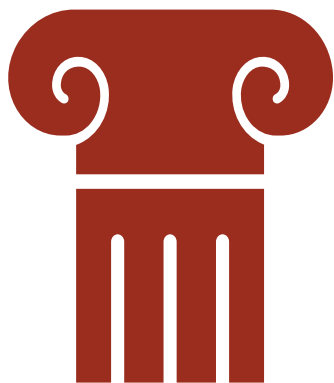
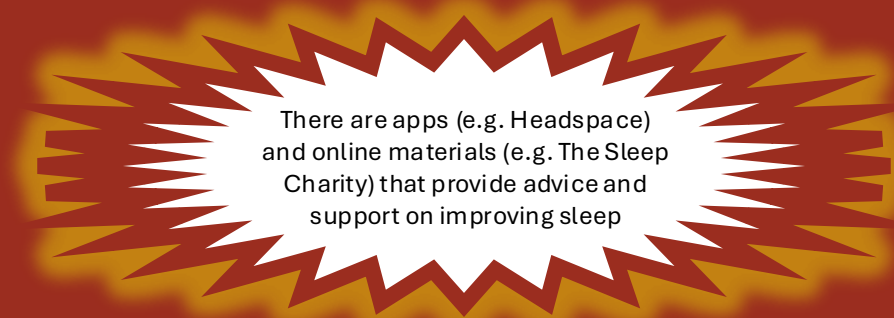
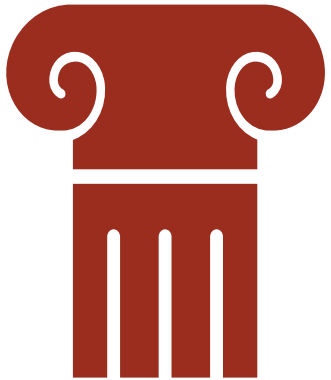


Photo Adapted from Heart Foundation, 2026





4) Mental Wellbeing



Fast-Acting Strategies



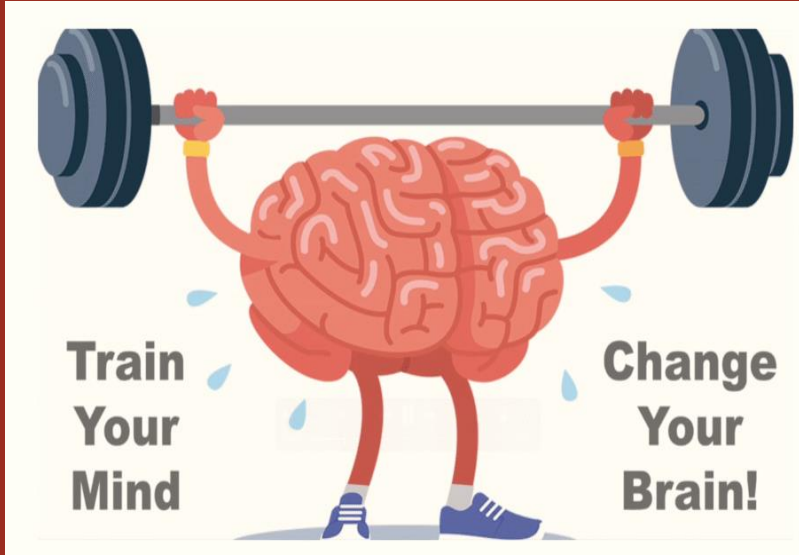
- Hug your loved one
- Aromatherapy
- Show your artistic side
- Try natural detox bath

Problem-Focused Coping Strategies



- Make a to-do list
- Seek social support
- Cut out toxic people

(Imaged Adapted from Calm Sage, 2021)



(Image Taken from Stanford Medicine, 2026)

Therapy For You is the local therapy service, which you can self-referral to online via therapyforyou.co.uk or by calling 01268 739128

There is online content advising upon how to take care of your mental wellbeing, which is available through 'Every Mind Matters'

Short-Term Strategies



- Meditation
- Guided imagery
- Progressive muscle relaxation
- Focused-breathing
- Nature walk

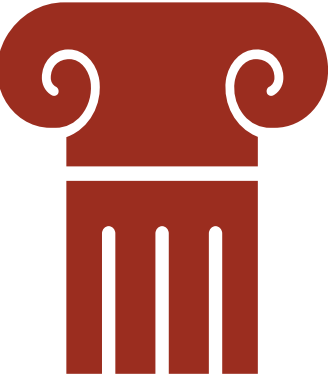
Long-Term Strategies



- Start having a balanced diet
- Leisure activities
- Develop positive self-talk
- Try yoga
- Practice gratitude
- Exercise



5) Healthy Relationships



Quality matters more than quantity. Having a few close, supportive relationships is more valuable than many shallow connections. Building relationships takes time and practice.

© 2025

Ways to Build Connections

One-on-One Time



- Have regular conversations with family
- Spend time with friends doing enjoyable activities
- Write messages to people you care about
- Video call with relatives or friends

Group Activities



- Join clubs, sports teams, or hobby groups
- Participate in family game nights
- Volunteer for causes you care about
- Attend community events

Helping Others



- Offer help with projects or problems
- Do kind acts for family members
- Support friends through hard times
- Share your skills with others

Building Connection Skills



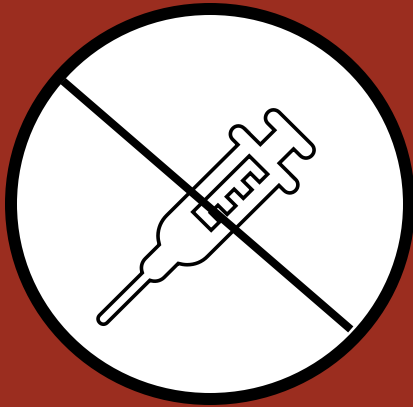
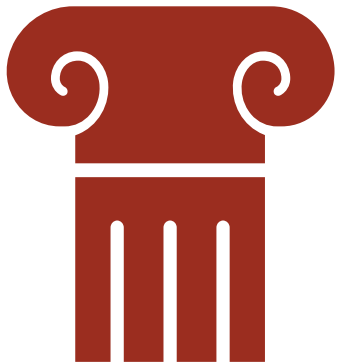
- Practice active listening
- Show interest in others' thoughts and feelings
- Be reliable and follow through
- Express appreciation and gratitude

Social Prescribers are available through your GP surgery and can inform you of local networking services

(Image Adapted from Mental Health Center Kids, 2026)



6) Minimise Harmful Substances



1) Avoiding Illicit Drugs



2) Minimising Alcohol

- <14 units/week, spread over >3 days



3) Smoking Cessation



Drug and alcohol recovery services are available via Open Road

Essex Recovery Foundation provides a community for people in remission for alcohol/drugs



Smoking cessation services are available via your GP surgery or pharmacy

HOW YOUR HEALTHCARE PROFESSIONAL CAN HELP



Clinical pharmacists are
present at your GP surgery,
who can conduct the
annual review or answer any
medication queries

NHS Health Check

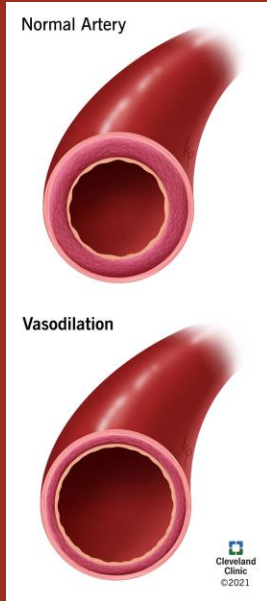


(Image taken from Almond Road Surgery, 2023)



Medication

VASODILATORS- WIDEN THE ARTERIES



(Images taken from Superdrug Online Doctor, 2026)

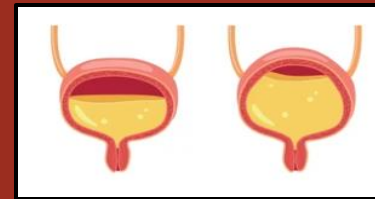
(Image taken from Cleveland Clinic, 2022)

BETA BLOCKERS- SLOW THE HEART RATE +/- WIDEN THE BLOOD VESSELS

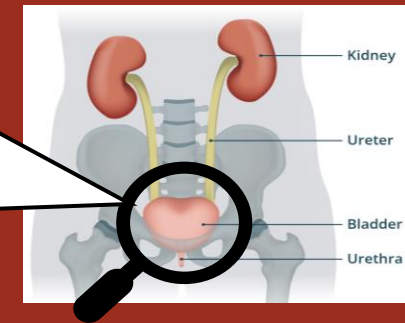


(Images taken from Superdrug Online Doctor, 2026 and SimplyMeds, 2026)

DIURETICS (WATER TABLETS)- HELP THE BODY TO REMOVE EXCESS SALT AND WATER



(Image adapted from Shutterstock, 2026)



(Image adapted from Healthdirect, 2024),



(Images taken from Superdrug Online Doctor, 2026)

Someone taking medication with well controlled blood pressure reduces their risk of heart attack or stroke to that of a person who does not have high blood pressure

Thank you for your attention

Any questions?

Know Your Numbers:
Understanding Blood Pressure
Webinar Feedback



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