





# **Brain Health Guide**

You can make lifestyle changes to improve your brain health at any age



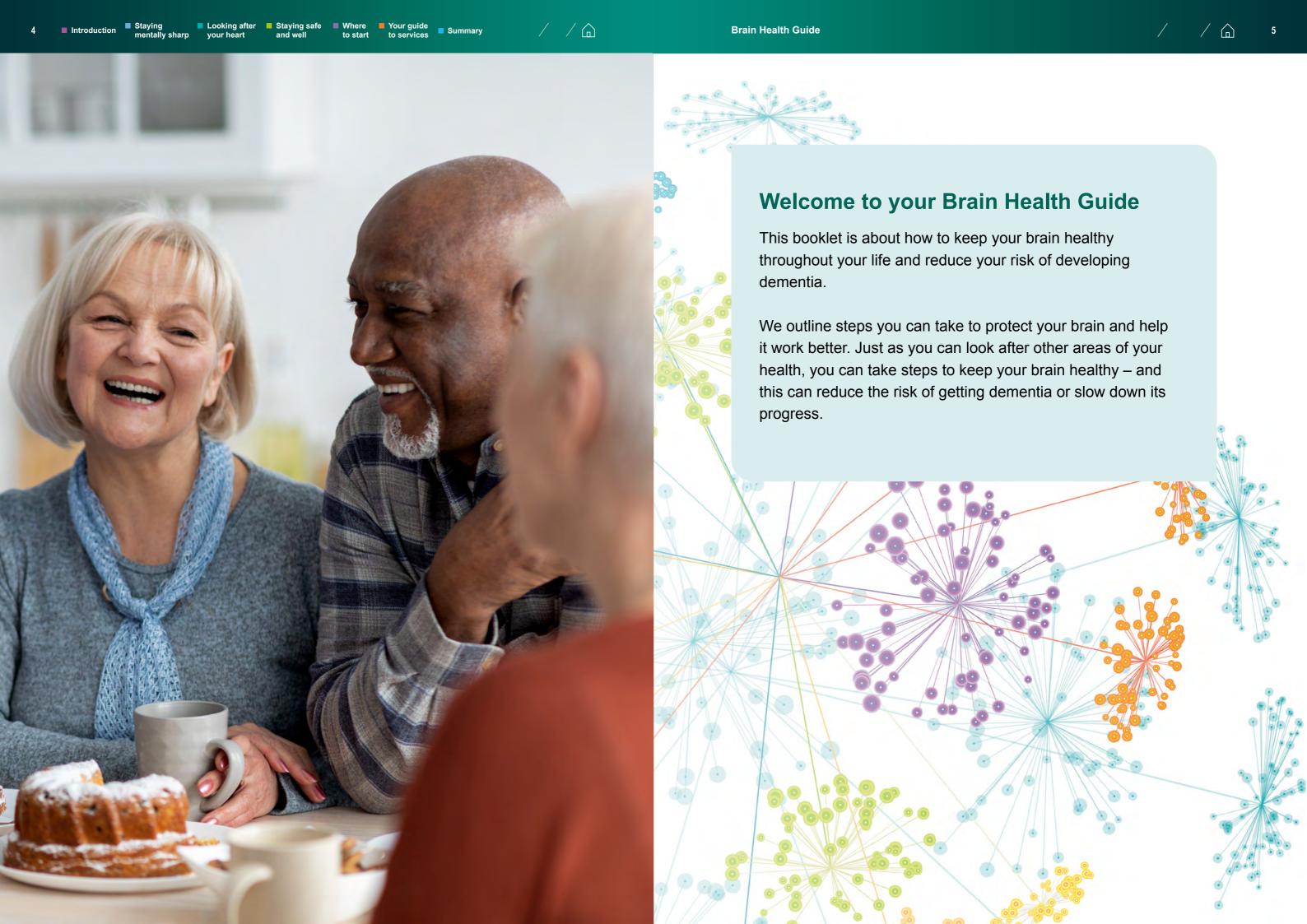
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When this Brain Health Guide is read on a screen, the headings in the content page and in the banner at the top of all pages are interactive and allow you to click and move to a section directly.





# Introduction

#### **Dementia risk factors**

We now understand a great deal more about the brain than we did even 10 years ago. In 2024, the medical journal The Lancet published a report on dementia. Using updated evidence, the report recommends ways to prevent, manage and treat dementia. The advice in this booklet is based on these recommendations.

For most of us, our risk of developing dementia depends on many factors, including our age, environment, lifestyle, health and genes. Some of these we can't control - such as our age and our genes. These are called 'non-modifiable' risk factors.

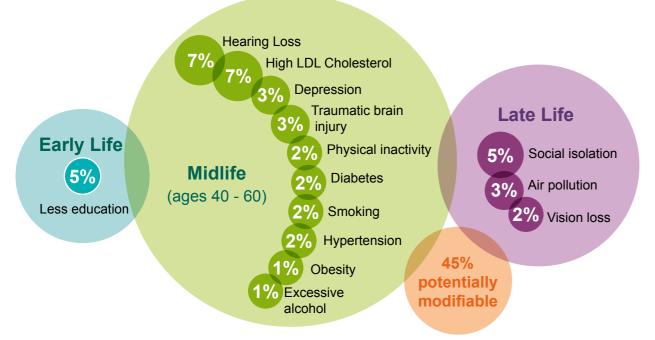
However, there are also 'modifiable' risk factors. These are things that we can fully or partly control – either as individuals or through public policy at government level. They include the way we live our lives and decisions we make every day.

Paying attention to these risk factors may prevent or delay nearly half of dementia cases.

The Lancet report lists 14 risk factors for dementia that we have some power over:

- Low levels of education
- Untreated hearing loss
- Hypertension (high blood pressure)
- **Smoking**
- Obesity
- Depression
- Physical inactivity
- Diabetes
- Alcohol consumption
- Traumatic brain injury
- Air pollution
- Social isolation
- Untreated vision loss
- High LDL (Low density lipoprotein) cholesterol

Tackling these factors may prevent or delay up to 45% of dementia cases.



#### What is brain health?

The brain governs everything that makes you human – the way you think, feel, move, behave and relate to people. It enables you to live life to the full as best you can. Brain health is about helping your brain do its job and reducing the risks that can affect it during your lifetime.

The different parts of our bodies all link up and depend on each other. This means that improving your brain health will improve your overall health. And better overall health will be good for your brain. What's more, our brains can change and adapt. So it is never too late or too early to start looking after your brain. This is important for everyone to know, whether or not you have a diagnosis of dementia.

There are things you can do to build up your brainpower, guard against 'wear and tear' and reduce the risk of losing your mental ability or of developing dementia.

This booklet looks at ways to keep your brain healthy in 3 main sections:

- 1. Staying mentally sharp
- 2. Looking after your heart
- 3. Staying safe and well

The final sections suggest how you can make a start and where to find support.



# 1. Staying mentally sharp

Make your brain work hard – you will build a reserve of brainpower that can keep you going for years.

#### Keeping your brain active

Keeping your brain active is good for:

- Memory
- Learning
- Thinking skills

Challenging your brain helps to build your 'cognitive reserve'. Cognitive reserve is the brain's ability to cope and keep working even when it is affected by diseases such as Alzheimer's.

# What sort of activities are good for the brain?

The key is to do things you enjoy. For example, you could:

 Carry on with old hobbies like reading, doing crosswords or playing card games.

- Discover new interests and take a class
   from art to dance.
- Learn something new, like a language or musical instrument.
- Take on a new responsibility such as looking after a pet or helping out at a charity shop.

Setting yourself a challenge and learning a new skill will increase your confidence. This can improve your mental health and wellbeing – and help you feel positive about your day-to-day life.

So take time out for things you enjoy. Along with good sleep, it will help you feel happier, healthier and more relaxed – a boost for your mental wellbeing.

# Take a class or join a club Play games and do puzzles Play games and magazines Read books and magazines Try dancing or singing

#### Staying connected

Social isolation puts you at greater risk of dementia. It also increases the risk of hypertension (high blood pressure), heart conditions and depression.

So keeping connected to the people around you is a good way to look after your brain. Your brain does well in company. It gets a boost when you are with other people. Spending time with friends and family can also help you feel happier and healthier in general. And if you are trying a new activity, you could join a group or take a friend – it's more fun and makes you want to come back for more.

Be social and stay connected. You can:



Meet up with friends and family – catch up by phone or a video chat if you can't be there in person.



Volunteer or get a job. There are often no special skills needed for volunteering.



Join a social club, such as a Men's Shed, a Women's Shed, a sports club or an active retirement group.



Visit your local library to borrow books, study, go online, find out what is happening in your area, and more.

If you need help to get started, you can use your local **social prescribing** service. Social prescribing is a way for General

Practitioners (GP) and other healthcare professionals to refer you to a range of non-medical supports in the community. This can make a big difference to your overall health and wellbeing. You can find your nearest social prescribing service at: www.allirelandsocialprescribing.ie/service-list-by-county

#### Mental health and wellbeing

#### **Dealing with stress**

Everyone feels stress sometimes, especially when dealing with difficult situations – things like relationship problems, work issues or money worries.

Stress can sometimes drive you to get things done or solve your problems. But a lot of stress over a long period can tire you out – physically, mentally and emotionally. It can also harm the brain and make it harder to keep on top of daily life. So make time for yourself and the things that help you switch off and relax.

Some stress-reducing tips:



Plan ahead if you have a busy week coming up.



Break down tasks into small manageable steps.



Focus on things you can control.



Think about the good things in your life.



Talk about your feelings.



Practise breathing exercises and mindfulness.

Try out the Health Service Executive's (HSE) Balancing Stress programme. This is a series of 6 videos you can watch online at any time for free. It helps you understand and manage different forms of stress, including worry, anxiety and depression, and gives practical tips on how to cope. Go to: <a href="https://www2.hse.ie/mental-health/self-help/balancing-stress/about">www2.hse.ie/mental-health/self-help/balancing-stress/about</a>

#### Feeling low?

Everyone feels sad or low at some stage of their lives. Often, low mood gets better after a few days or weeks. If it lasts longer than 2 weeks, it may be a sign of depression. Depression increases your risk of developing dementia, so getting early support for depression is very important.



Do some exercise. Any level of activity will help, such as walking, jogging or swimming. Take it as slowly or as fast as you like.



Do something nice for someone else – say thank you or make a little gift. Giving is good for the giver as well as the receiver.



Join a group, or offer your time to help with one. It's good to be part of a community and to know you can make a difference to other people in it.

Always feel free to talk to your local GP for support and advice.

#### Tips for banishing a low mood:



Connect with other people.



Talk about your feelings.



Do things you enjoy.



Do something creative.



Listen to music.



Go outside for some fresh air in nature.



Try to challenge unhelpful thoughts

– take control of those bad or sad ideas in your head.



#### Sleep

#### Why sleep is important

You need 7-9 hours of sleep every night to let your brain restore itself. Good sleep is important for brain health in many ways.

- Mind and body both need rest and repair.
- Memories are sorted out and stored while you sleep.
- Sleep is part of the daily rhythms of life

   rhythms that govern things like energy levels, appetite and heart rate and allow your body to work properly.
- While you sleep, the fluid in your brain flushes out waste substances that build up during the day. This includes the toxic proteins that are linked to Alzheimer's disease.

#### Lack of sleep can lead to:

- Poor memory
- Problems with long-term and short-term thinking
- Difficulty with strength and balance causing falls or head injuries that may damage the brain
- Issues with your heart and blood circulation

#### Tips for sleeping well

Things you do throughout the day can help you sleep well at night. Here are some of our main tips.





#### Morning

Where possible, wake up at the same time each morning and go to bed at the same time every night. This helps your body to keep to a natural rhythm of waking and sleeping.

Keep a regular sleep/wake schedule

# Get out into natural light as soon as you can in the morning

Natural light, even on a cloudy or grey day, helps reset your internal body clock. It helps you feel alert instead of groggy after waking up.



#### Be active

Exercise helps you sleep more deeply and for longer – so you wake next day feeling fresher. However, exercising too close to bedtime can keep you awake. Try to finish any moderate to vigorous activity at least 2 hours before bedtime.

# Avoid caffeine for 8 hours before bedtime

Some people find caffeine keeps them awake. So allow plenty of time between your last cup of tea or coffee and going to bed.





#### Don't go to bed full, hungry or thirsty

Eating at regular times is another way to set your internal body clock. But eating a heavy meal before bedtime can make it difficult to sleep. And having a lot to drink may mean you need to get up in the night to use the toilet. On the other hand, being hungry or thirsty at night can also make you wake up.

Try to strike a balance – don't go to bed hungry or feeling very full.

#### No electronics at bedtime

Blue light from your phone, tablet or TV can keep you awake as it interferes with the hormones that make you sleepy. Also, activities such as scrolling or messaging may keep your mind too busy to relax.

#### **Avoid alcohol**

Although alcohol is a sedative and may help you fall asleep, it can mean you sleep less soundly and wake up in the night. That is because alcohol tends to reduce the amount of rapid eye movement (REM) sleep you get. Lack of REM sleep can leave you feeling drowsy and unable to concentrate during the day.

When you stop having a drink before bedtime, your body may take some time to get used to falling asleep without alcohol. Once you break the habit, you should find yourself more rested and full of energy.



#### Ensure the bedroom is cool, dark and quiet before bed

Heat, light and noise can make it hard to fall to sleep. They also make you more likely to wake in the night. Things that can help you sleep better:

- Have a cool, dark and quiet bedroom and a firm comfortable bed.
- Keep the bedroom clock out of sight - because watching the clock at night only makes you more anxious about losing sleep.

For more information on how to sleep well and how to cope with sleep problems, see: www2.hse.ie/mental-health/issues/ sleep-problems

### Coping with fatigue (with the 5 Ps)

It's normal to feel tired from time to time, but often a good night's sleep can put things right. Fatigue is when a good night's sleep is not enough.

Fatigue can be physical or mental, or both, and is not cured by sleep. If you feel tired for weeks at a time, it may be fatigue rather than ordinary tiredness. Mental fatigue can make you confused, slow to react, irritable or depressed. If you find it hard to manage everyday tasks, recognising the problem as fatigue can be a good first step. You should talk to your GP about the possible reasons.

Here are some tips for saving your energy and managing fatigue. They are known as the 5 Ps.

#### THE 5 PS OF ENERGY SAVING



#### Planning

- Plan ahead for the day and week.
- Spread out the tasks don't try to do everything in one go.



#### Pacing

- Break a task down into small steps.
- Take regular breaks.
- Avoid rushing.



#### Prioritising

- Start with the tasks that are the most important to you.
- Don't do unnecessary jobs.
- Do ask for help.



## **Positioning**

- Stand or sit with a good posture.
- Save your energy by sitting instead of standing, for example in the shower.



#### Positive attitude

- Be kind to yourself.
- Don't be cross with yourself if you can't do something.
- Remember your energy levels can go up and down day to day.

# **Looking after your heart**

A healthy heart helps keep your brain healthy too. Your brain needs a good supply of blood to keep it working properly - and blood supply depends on the heart.

There are many things you can do to look after your heart. Small changes in lifestyle add up to make a big difference.

Here we look at 3 main ways to look after your heart: stop smoking, keep moving and eat well.

#### Stop smoking

If you smoke, quitting is probably the most important step you can take to protect both your heart and your brain. Quitting – even in later life – can greatly reduce your risk of harm. It's never too late to quit.

#### Why quit?

Smoking can lead to:

- Cancer
- Stroke
- High blood pressure
- Heart disease
- Dementia especially Alzheimer's disease and vascular dementia

So quitting smoking can protect both your brain and your general health. It will improve your memory and reduce the risk of cognitive decline (the loss of your thinking abilities).

There are lots of good reasons to stop smoking. The health benefits of quitting start right away.

For example, tobacco smoke contains the poisonous gas, carbon monoxide. It will all be flushed out of your body just 48 hours after your last cigarette, and your circulation will improve within a few weeks.

#### When you stop smoking, you:



Reduce your risk of life-threatening diseases



Save money



Improve the air quality in your home



Reduce symptoms of anxiety disorder and depression



Have better skin, teeth and hair



Will be a good role model for your family and friends



Protect your family from second-hand smoke



Have nicersmelling clothes



Simplify your life - you will not have to think about when and where vou can smoke

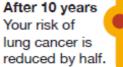
## Physical health benefits

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The benefits from stopping smoking increase over time.







After 5 years Your risk of smoking-related cancers is greatly reduced.



After 15 years Your risk of having a

heart attack is now the

same as a non-smoker.





Change your attitude towards smoking. Think about the freedom you'll have when you finally break free and take back control.

#### How to quit

You are 5 times more likely to guit for good if you do all of these:

- Commit to quit for 28 days.
- Get support to quit from HSEtrained QUIT advisers. Staying safe and well.
- Use nicotine replacement therapy (NRT) or prescription medicines to help you stop smoking.

#### What if I relapse?

You can get back on track. Say you decide to guit smoking and things are going well. Then one tough day hits, and you smoke again. Relapsing is not the end! It's just a setback on your way to quitting for good, and it happens to many of us. What matters most is to keep trying. Every attempt brings you closer to a healthier, smoke-free life.

#### How do I get started?

Call the HSE's Quitline on 1800 201 203. Quitline staff will provide non-judgmental support and encouragement. You will get your own free Quit Plan, with simple, practical advice to help you quit and stay quit.

Focus on the goal to stay smoke free for one day at a time until you get to 28 days. If you get to 28 days, you are up to 5 times more likely to quit for good.



#### Staying active

Moving around is one of the best things you can do to boost brain and heart health.

#### Why regular physical activity is good for you

- It strengthens your muscles and bones and gets blood flowing through your heart and blood vessels (the cardiovascular system). This includes the blood flow to the brain.
- Activity is just as important for your mind and brain as for the rest of your body. Keeping active can improve cognitive powers (your thinking skills) such as memory, attention, planning and organising.
- Regular activity helps create new brain cells (neurons). It does this by releasing certain chemicals that help brain cells to grow. This is known as 'neurogenesis'. It takes place especially in the part of the brain responsible for learning and memory.

So activity helps keep your mind sharp and can lessen the effects of ageing on the brain.

There are lots of ways you can become more active. Every move counts.

#### How much activity do you need?

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The advice depends partly on your age. In general, the more time you spend being physically active, the greater the benefits. But even small increases can improve your health and quality of life.

- If you are aged 18-64, just 2 hours and 30 minutes of moderate aerobic activity spread across the week will improve your bone and heart health, brain power and mental health. This includes people living with a disability. Aerobic activity involves using your muscles, making your heart and lungs work better. Moderate activity includes brisk walking, slow dancing, riding a bike, housework and gardening. The effort you put into it should be enough to increase your pulse rate and make you breathe faster and feel warmer.
- Alternatively, try at least 1 hour and 15 minutes per week of vigorous activity. For example, go running or swimming, cycle uphill, play football or climb stairs.
- For people over 65, including those with a disability, the general rule is to keep as active as possible. Activities that strengthen your muscles are especially important. These could include yoga classes or resistance training with weights or bands, or simply carrying heavy shopping bags. Try to do these strengthening activities at least twice a week.

You can do your weekly minimum exercise when and how you want to, but remember that the more you do, the more your health will benefit. Try to limit the time you spend sitting still – break it up by moving around.

# What are moderate aerobic physical

Brisk walking, slow dancing, riding a bike, mowing the lawn or sweeping the floor







What are vigorous aerobic physical activities?

Running, swimming, cycling uphill, walking upstairs and playing football







The activity should make you breathe hard and fast.

One of the simplest ways for most people to be more active is to get out for a walk as often as possible during the week. Remember, every move counts.

#### For more information:

- The HSE has a series of videos on exercise for beginners: www.hse.ie/eng/ about/who/healthwellbeing/exercisevideos
- If you are living with a health condition, you will find the following site helpful and easy to use: www2.hse.ie/livingwell/exercise/being-active-healthcondition/being-active



#### Healthy eating and drinking

Good nutrition is an important part of a healthy lifestyle. It is never too late to improve your usual diet.

It also helps to manage conditions that can affect brain health, such as high blood pressure, high cholesterol and diabetes.

In this section we look at:

- Mediterranean diet
- Cholesterol and why it matters
- Alcohol

#### Go Mediterranean

Please note: if you are on a dietary plan set for you by a dietitian or other healthcare professional, you should stick to their guidelines. Talk to them about whether a Mediterranean diet is suitable for you.

Research shows that a Mediterraneanstyle diet is particularly good for your heart and brain. Take these 8 main steps to go Mediterranean.



Daily	Regularly over the week	Only occassionally	Also
Dairy or dairy alternatives such as soya, tofu Fruit Vegetables Wholegrains Pulses Unsalted nuts and seeds Olive oil Water	Fish (aim for oily fish twice a week) Lean meat, poultry Eggs	Ultra-processed foods Biscuits Cakes Sweets Crisps	Keep active everyday Socialise

Ideally include a variety of sources of protein at meals 2-3 times per day, e.g. lean meat/ fish/ soya/ beans, lentils/ eggs/ dairy or dairy alternatives such as soya, tofu.

Adapted from Eating Well to Support your Memory, Irish Nutrition and Dietetic Institute, Older Persons Nutrition Interest Group

#### What is important for a healthy diet?

Good fats: Use extra-virgin or virgin olive oil and cold-pressed rapeseed oil. These oils are high in monounsaturated fats and low in saturated fats.

Food rich in polyphenols: Many plants and plant-based foods are rich in a micronutrient called polyphenol, which benefits our heart and brain health. These foods include olive oil, spinach, soybeans, flaxseed, dark chocolate, olives, berries, apples, almonds and sweet cherries.

Oily fish: Oily fish is high in omega 3, which has many health benefits particularly for the heart, brain and mental health. Aim to eat eat oily fish such as mackerel, salmon, trout and sardines twice a week. You can buy them fresh, frozen, tinned or vacuum packed. Fresh (but not tinned) tuna also counts as an oily fish rich in omega 3.

**Sofrito:** This is a mixture of tomatoes. onion, herbs and garlic fried in a little olive oil. It can be used as a base for dishes such as pasta sauce, bruschetta, soups and stews.

Dairy products and calcium-enriched alternatives: Milk, cheese, cream, yogurt and calcium-enriched alternatives can be included daily to provide calcium, protein, riboflavin, vitamin B12 and other micronutrients. Aim for 3 servings of dairy foods a day for adults under 65 and 3 to 4 servings a day for adults over 65. Choose low-fat varieties where possible.

#### Making the move to a Mediterraneanstyle diet



Swap these	Choose these instead
White bread, pasta, rice	Wholegrain bread, brown pasta, brown rice
Refined cereal (coco pops, crunchy nut cornflakes etc)	Porridge, oat-based cereals, no-added-sugar granola or muesli
Saturated fat, butter, cooking oil, margarine	Extra virgin or virgin olive oil, rapeseed oil, olive/sunflower-based spreads
Sweets, cakes, biscuits, chocolate, pastries, crisps	Oatcakes, unsalted nuts, natural yogurts, fresh fruit
High-fat take-aways, sausages, burgers, and processed meat such as ham, rashers	Meals made from fresh ingredients such as lean meat, oily fish, seafood, beans, peas, lentils, soya protein or tofu
Full-fat cheese, cream, milk	Reduced-fat dairy products and dairy alternatives

Adapted from Eating Well to Support Your Memory, Irish Nutrition and Dietetic Institute, Older Persons Nutrition Interest Group

- Have a look in your kitchen cupboard. Have you got any ultra-processed foods? These are foods that have unfamiliar ingredients not usually used in home cooking. Try to swap them for less processed, plainer or more natural foods.
- Make changes one step at a time, so you can be sure you can keep it up.
- 'Eat a rainbow'. Fruit and vegetables

- of varied colours provide a range of different nutrients.
- Tell family or friends about your new diet, so they can offer ideas and support.
- Make meals a social occasion when you can - sharing is often more fun than eating alone.



#### Sample meal plan for a Mediterranean-style diet

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BREAKFAST	Bowl of porridge or wholegrain cereal with low-fat milk. To make it special top with natural yogurt, walnuts and berries or  Scrambled eggs on two slices of wholegrain toast with olive oil-based spread. Add smoked salmon for a treat or  Half a smashed avocado on 2 slices of wholegrain toast, topped with fresh tomatoes, low-fat cheese or  On the go? Try a homemade fruit and vegetable smoothie
SNACK (if required)	Fresh fruit or 2 tablespoons of reduced fat hummus with chopped carrots, cucumber or celery
LUNCH	Fresh lentil or vegetable soup with a wholegrain roll and olive oil-based spread or  Lean meat/tinned oily fish/egg/cheese on wholemeal bread/pitta/wrap with lettuce, tomato and onion, drizzled with a tablespoon of olive oil or an olive-oil dressing or  Mixed salad with lean meat/oily fish/eggs/grilled tofu or mixed beans, topped with toasted mixed seeds and an olive/rapeseed oil-based dressing or  Roasted Mediterranean vegetables (peppers, garlic, aubergine, courgette, cherry tomato, onions, roasted in olive/rapeseed oil) in a wholemeal pitta bread or wrap
SNACK (if required)	Handful of unsalted nuts  or  Two oat cakes with 100% peanut butter  or  Glass of low-fat milk  or  Low fat yogurt, soya yogurt, fruit
EVENING MEAL OR MAIN MEAL	Baked salmon brushed with olive oil and lemon served with roasted parsnips, broccoli and 2 medium potatoes mashed with olive oil or  Mixed lentil and vegetable chilli with a sprinkle of low-fat cheese, served with brown rice or  Mixed fish pie with peas and carrots or  Chicken with a vegetable stir fry, served with brown rice

For recommended portion sizes, see the food pyramid under Healthy Eating Guidelines on <a href="https://www2.hse.ie/living-">https://www2.hse.ie/living-</a> well/healthy-eating/how-to-eat-well/

#### Cholesterol

Cholesterol is a fatty substance that is found in every cell in your body and has many roles. It forms part of the outer layer of every cell, helps keep bones, muscle, skin and teeth healthy, and also helps nerves work properly.

There are 2 types of cholesterol.

#### LDL (bad cholesterol)

- When your blood contains too much LDL cholesterol, the excess can stick to your artery walls.
- This causes the arteries to harden and

narrow and they may eventually block up. This is known as atherosclerosis.

Too much LDL cholesterol can stop blood flowing to the brain and heart, and increase the risk of a heart attack, stroke and dementia.

#### HDL (good cholesterol)

- HDL binds to some of the excess LDL and removes it through the liver.
- When you are active, your body makes more HDL.

**Triglycerides** are another type of fatty substance in the blood.

- They are produced by the liver.
- They can be found in dairy products, meat and cooking oils.

#### What you can do to lower cholesterol

Lifestyle changes can help to lower your LDL cholesterol.

- Stay physically active.
- Eat a healthy balanced diet.
- Keep your weight at a healthy level.
- Cut down on caffeine.
- Stop drinking or cut down on alcohol.
- Stop smoking.

These changes to your lifestyle and diet can also help with lowering your blood pressure and managing type 2 diabetes. If your LDL cholesterol level remains high, your doctor may prescribe tablets to bring it down.

#### Alcohol

Alcohol can damage your brain cells. It therefore increases your risk of dementia. It is also linked to over 200 other health conditions, including cancer, stroke, heart disease and liver disease. The more alcohol you drink, the higher your risk is. Alcohol is a depressant that causes damage to the brain itself over time.

#### Alcohol can:

- Disrupt the way that brain cells communicate
- Make you drowsy or dizzy
- Affect your memory, thoughts, feelings and actions
- Reduce your ability to absorb vitamins and other essential nutrients, such as thiamine and magnesium, which our brains need to work properly.

#### Why cut down on alcohol?

The benefits of drinking less alcohol, or cutting it out entirely, include:

- Better mental health: You can leave behind your low mood, anxiety and tiredness, and have more energy for things that make you happy.
- Better physical health: Put an end to hangovers and heartburn in the short term, and reduce your risk of long-term problems such as cancer, high blood pressure, liver and heart disease, brain damage or dementia.
- Healthier appearance. It will be easier to reach or stay at a healthy weight without the calories and sugar content of alcohol (alcohol has nearly as many calories per gram as fat, and a bottle of white wine can contain about 8 teaspoons of sugar).
- Better sleep, more energy: Without alcohol you will sleep more soundly and wake feeling fresher.
- Saving money: This will leave more cash for the things like going on holiday or buying sports or concert tickets.

#### **TOTAL CHOLESTEROL**

#### LDL or bad cholesterol

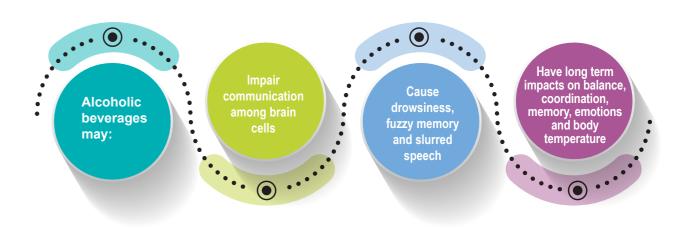
- Sticks to artery walls
- Hardens to form plaque
- Reduces blood flow to the heart and brain

#### **HDL** or good cholesterol

- Binds to LDL cholesterol and removes it from the body
- Is increased by exercise

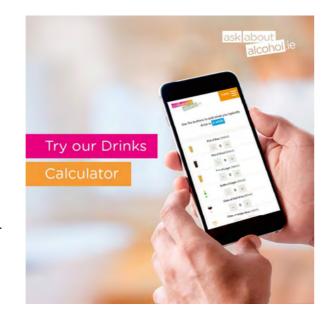
## Triglycerides

- Fats formed from fatty acids
- Excess can be converted into LDL



#### How can I cut down?

- Space out your alcohol intake over a week and have as many alcohol-free days as possible.
- Drink no more than 2 standard drinks at any one time.
- Alternate alcoholic and non-alcoholic drinks.
- Try not to get into rounds. Or, if it is your round, choose a non-alcoholic drink for yourself.
- Do not buy alcohol in your weekly shop and don't keep any at home.
- If you are going to drink alcohol, eat beforehand. Food reduces the effects of alcohol.
- Drink slowly. Don't gulp take small sips and take the time to enjoy the taste.
- Use smaller glasses so it is easier to keep to the standard drink size.
- Count how many drinks you have in a week. Set a limit for yourself and stick to it.



You can find more tips for drinking less at: <a href="https://www2.hse.ie/living-well/alcohol/health/improve-your-health/tips-for-drinking-less/">www2.hse.ie/living-well/alcohol/health/improve-your-health/tips-for-drinking-less/</a>

Even in small quantities, alcohol is not safe for health. The more you drink, the greater the risk. So any reduction will be good for your health.



# Staying safe and well

Our body and mind are connected. It's important to look after both. In this section we look at:

- Head injury
- · Health conditions that affect the brain, including diabetes
- Loss of hearing and vision
- Medication

#### **Head injury**

A head injury, particularly a traumatic brain injury (TBI), can increase your risk of dementia.

#### What is a traumatic brain injury?

A TBI is caused by a heavy bump, blow, or jolt to the head or body, or an object entering the brain. Not all blows, jolts or head injuries result in a TBI. A TBI only occurs when a head injury disrupts how the brain normally functions.

#### TBI can lead to:

- loss or partial loss of consciousness
- disorientation feeling dazed or confused
- loss of memory from before or after the injury

#### Most TBIs result from falls. Falling is especially dangerous for older adults.

Accidents can happen at any age. However, as we get older, we are at more risk of falls and other accidents that can cause brain injuries.

#### How can I reduce the risk of falls or other accidents?

- Exercise to improve muscle strength, balance and coordination. This in turn reduces your risk of falls.
- Wear safety gear such as a seatbelt or helmet.
- Take a fall prevention class.
- Make sure your home is safe for example, check for loose rugs or awkward steps.
- Review medicines with your GP or a pharmacist - for example, ask about side effects that might make you dizzy or unsteady.
- Have your eyesight and hearing tested.
- Get enough sleep (aim for 7-8 hours a night).

#### How can I avoid TBI in sports?

Think in advance about the risks and how to protect yourself. For example:

- Wear protective headgear.
- Avoid heading balls or risking highimpact collisions.

#### Health conditions that can affect the brain

#### These include:

- problems with the blood, such as heart disease and diabetes
- conditions that make you feel cut off from people, such as depression and loss of hearing
- long-term mental and physical effects of a head injury

Ask your GP for regular check-ups to monitor your overall health. Pick up on any concerns early, and follow medical advice.

#### Some of the conditions affecting the brain



#### Heart disease, stroke and high blood pressure

Heart disease and high blood pressure can damage the

blood vessels in your brain. They reduce the blood flow and make arteries more likely to clog up. This can:

- Directly cause a stroke when blood stops flowing to a part of your brain
- Lead to faster loss of brain cells in later life, meaning you have difficulty with thinking or remembering and have increased risk of dementia

Blood pressure is a measure of the pressure on your blood vessel walls as blood is pumped from the heart around the body. High blood pressure in midlife is known to affect brain health in later life.

Two values are used in measuring blood pressure:

- Systolic blood pressure: the pressure during a heart beat
- Diastolic blood pressure: the pressure when the heart muscle relaxes between beats and fills up with blood

Blood pressure is shown in numbers like this: 90/60 mmHg. It is healthy when:

- The upper figure (systolic) is between 90 and 120 mmHg
- The lower figure (diastolic) is between 60 and 80 mmHg



#### **Diabetes**

Diabetes causes your blood sugar level to become too high.

This can damage blood vessels throughout your body, including those in the brain. Having diabetes, particularly in midlife, can have serious consequences such as sight loss and amputation, and raises your risk of dementia.

#### Managing diabetes

There are two types of diabetes: type 1 and type 2. You cannot prevent type 1 diabetes but, if you have it, you can use insulin to help control your blood sugar levels.

You can lower your risk of getting type 2 diabetes if you:

- Stop smoking
- Eat a healthy balanced diet
- Stay physically active
- Drink less alcohol

The same rules can help you control your symptoms if you already have type 2 diabetes.

#### Obesity

Obesity is a complex, chronic condition where excess body fat affects health. Being obese can put a strain on your heart, blood vessels and your brains. It puts you at high risk of developing other medical conditions including high blood pressure, high cholesterol, heart disease, stroke and diabetes (insulin resistance and type 2 diabetes). Obesity is also linked to a higher risk of dementia and cognitive decline.

Diagnosis of obesity is based on a combination of weight and other measurements. Body weight is complicated. It can develop slowly over time or in rapid bursts. Over 100 things can influence it, including genes, hormones, medications and cultural factors. Weight loss can lead to health benefits for some people. However, it can be difficult and hard to maintain. Some people spend their lives losing and regaining weight. This is not good for physical or mental health.

Managing stress, sleeping well, eating well and staying physically active are all things you can do to stop your weight affecting your health.

## Loss of Hearing and vision

The loss of hearing or vision may increase the risk of dementia. This is because it is more difficult to stay connected with people when you cannot hear or see properly.

Mixing with others keeps your brain lively. This mental stimulation builds up your 'cognitive reserve' – the thinking abilities that help you avoid or cope with diseases such as Alzheimer's.



#### Get your hearing checked.

Wearing hearing aids to treat hearing loss in midlife can reduce your risk of mental

decline by almost 20%. So it's important to get your hearing checked regularly as you get older, and to wear hearing aids if you have them.



#### Have your eyesight tested.

If you have problems with your eyesight, it is important

to get your eyes checked. Uncorrected vision problems in later life increase your risk of developing dementia. 'Uncorrected' means you have not yet put the problem right by wearing glasses or lenses or having treatment.

#### **Medications**

Some medicines can affect the way your brain functions. If you take more than one medicine, you need to be aware of how they may interact.

Talk with your GP or pharmacist about:

- Side effects on memory and brain function
- Whether your medicines can affect sleep
- Interactions between different drugs both prescription or over-the-counter medicines

#### Drug interactions with alcohol

If you drink alcohol and take medicines or other drugs at the same time, the effects can be unpredictable or dangerous. This applies to taking alcohol with prescription and over-the-counter medicines as well as with illegal drugs.

#### How to take medications safely

Keep taking your regular medications - and follow the instructions.

#### **REMEMBER:**

- Report side-effects to your GP or pharmacist promptly.
- Use a reminder system for example, ask your pharmacy to supply pills in a blister pack, buy a pill box or use a smart-phone app.
- Tell your doctor about any supplements or over-the-counter drugs you also take.
- You can order your prescription medication over the phone so that it is ready for collection.
- Many pharmacies now offer a medication delivery service - ask if this is available to you.





0 Intro

# Where to start

Take small steps – they can make a big difference. Many risk factors in brain health link up with one another, so a change in one area can benefit others.

Choose something from this list that you can do in the next week.

- Book a health check-up
- Keep a diary of daily meals or activity
- Check your list of medicines with your doctors
- · Find out what is going on at your local community centre
- Have an extra daily helping of fruit and vegetables

#### Helpful resources

Being active	'How to stay active and flexible – Advice for older adults' booklet is available to order free of charge from www.healthpromotion.ie www2.hse.ie/living-well/exercise/active-for-your-lifestyle/
Eating well	'Healthy Food for Life' and 'Healthy Eating for Older Adults' leaflets are available to order free of charge from <a href="https://www.healthpromotion.ie">www.healthpromotion.ie</a> www2.hse.ie/living-well/healthy-eating/
Mental health	For ways to look after your mental health go to www.yourmentalhealth.ie
Quit smoking	Find out how to quit at: www.quit.ie or call the QUITline on 1800 201 203
Alcohol	Find out about supports at: www.askaboutalcohol.ie or call the HSE Alcohol Helpline on 1800 459 459
Heart health	Get more information at: https://irishheart.ie/
Diabetes	Find out more at: www2.hse.ie/conditions/diabetes/
Obesity	'Talking about weight – A guide to developing healthier habits' is available to order free of charge from <a href="www.healthpromotion.ie">www.healthpromotion.ie</a> <a href="www2.hse.ie/conditions/obesity/">www2.hse.ie/conditions/obesity/</a>

#### Find out more online

HSE Health and Wellbeing YouTube channel has podcats and videos on a range of health and wellbeing topics

You can download and print information on health and wellbeing from <a href="https://www.healthpromotion.ie">www.healthpromotion.ie</a>

# Your guide to services and supports

#### Community-related information, supports and services

#### **ALONE**

Alone is a national organisation that enables older people to go on living at home. It offers befriending services, advice, assistive technology and support.

www.alone.ie

#### Age Action

Age Action runs practical programmes to support older people to live at home and gain the IT skills they need for modern life. It also offers Care and Repair, small DIY jobs, free of charge, for older people to help them maintain their homes and their independence. <a href="https://www.ageaction.ie">www.ageaction.ie</a>

#### **Family Carers Ireland**

This is a national charity that supports family carers and young carers by providing free help with planning for emergency care; counselling; specialised training and education programmes; information on rights and entitlements; and many other services. <a href="https://familycarers.ie">https://familycarers.ie</a>

#### **Family Resource Centres**

These centres provide a range of services and development opportunities to meet the needs of families. They also offer education courses and training opportunities. <a href="https://www.familyresource.ie">www.familyresource.ie</a>

#### Library services

The national network of libraries offers a wide range of free services online and computer/internet access in local branches.

www.librariesireland.ie

#### Men's Sheds

The aim is for all men to have the opportunity to look after and improve their wellbeing on their own terms and within their own communities.

https://menssheds.ie

#### Parkrun Ireland

Parkrun is a free community event where people meet every Saturday at 9.30am to walk, jog, run, volunteer or watch – at different parks around the country.

www.parkrun.ie

#### **Sister Sheds**

Create a space where women can come together, empower one another, and provide unwavering support.

www.sistersheds.ie/

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#### Social prescribing

This programme enables GPs and other health professionals to refer people to nonclinical community supports, such as social groups or activities, which can benefit their overall health and wellbeing.

www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/mental-health-and-wellbeing/social-prescribing

#### Dementia-related information, supports and services

#### **Dementia: Understand Together**

This is a public support, awareness and information campaign to ensure that people affected by dementia are respected, included and supported in their communities

#### www.understandtogether.ie

Email: understandtogether@hse.ie

#### **Dementia Services Information and Development Centre (DSIDC)**

Get information on dementia, training, education and research – with booklets and factsheets for people with dementia and family caregivers.

Email: dsidc@stjames.ie Phone: 01 416 2035 www.dementia.ie

#### **Memory Technology Resource Rooms**

The Resource Rooms allow people with memory difficulties or dementia, and their families and friends, to try out a range of products that can make independent living

www.hse.ie/eng/dementia-pathways/services-and-support/memory-technology-resource-rooms

#### The Alzheimer Society of Ireland

Learn about dementia and supports/services for carers and people with dementia.

Call the national helpline for free on 1800 341 341.

www.alzheimer.ie

#### **Dementia Advisers**

Dementia Advisers help people with dementia and their families to get information, supports and services.

Phone 1800 341 341

Email: helpline@alzheimer.ie

www.alzheimer.ie

#### **Western Alzheimers**

This charity offers care and support services for people and families with dementia in counties Mayo, Galway and Roscommon.

https://westernalzheimers.ie

# What you can do to reduce the risk of dementia



#### Do physical activity

- Exercise pumps blood to the brain to feed your brain cells with nutrients and oxygen.
- Regular exercise also helps to reduce stress and improve your mood.
- Not getting enough physical activity can lead to health risks that affect your brain health, such as diabetes and high blood pressure.



#### Choose a healthy diet

 An unhealthy diet that is high in saturated fat, sugar and salt can increase the risk of developing many illnesses, including dementia and cardiovascular disease.



#### Be sociable

- Being isolated socially can increase the risk of hypertension, heart disease, depression and dementia.
- Keeping socially active may reduce the risk of dementia, and slow it down once it has started.



#### Drink less alcohol

- Drinking alcohol affects your health. Drinkers are likely to have more health problems later in life.
- Health problems can include liver failure, cancers and brain damage leading to dementia.
- Drinking less alcohol can help to reduce the risk of developing dementia.



#### Stop smoking

- The evidence is strong and consistent that smokers have a higher risk of developing dementia than non-smokers or ex-smokers.
- Quitting at any time reduces your risk of developing dementia.



#### Continue learning

- Lifelong learning can help develop your 'cognitive reserve' your brain's ability to go on thinking and reasoning.
- Actively using your brain throughout your life may protect your brain cells from the damage caused by dementia.









#### Take care of your mental health

- Depression in midlife or later life can put you at higher risk of developing dementia. Remember that depression is more than just feeling down.
- Mental health affects physical health. If things such as depression, anxiety and stress are not properly managed, they can seriously harm the health of your brain and body.



#### Take care not to fall

- Falls are the leading cause of traumatic brain injury (TBI). Falling is especially dangerous for older adults.
- Severe or repeated head injuries, such as concussion, increase your risk of developing dementia.



#### **Prevent diabetes**

People with type 2 diabetes in midlife are at an increased risk of developing dementia, particularly Alzheimer's disease and vascular dementia.



#### Keep an eye on your blood pressure

- People who have consistently high blood pressure (hypertension) in midlife are more likely than those with normal blood pressure to develop dementia.
- High blood pressure can increase the risk of developing dementia, particularly vascular dementia, because of its effect on the heart, arteries and blood circulation to the brain.



#### Get cholesterol checked regularly

- High levels of 'bad' LDL cholesterol in mid-life and later life are linked to increased risk of dementia.
- Low levels of 'good' HDL cholesterol in your 30s to 60s can also increase your risk of dementia.



#### Take care of your eyesight and hearing

- Losing your sight or hearing may increase your risk of dementia.
- This is due to both changes in the brain and social isolation.
- Hearing loss can cause the brain to shrink so it works less well (cognitive decline).
- When it becomes difficult to hold conversations or join in activities, you can lose some of your confidence and independence, leading to loneliness and
- Having correctly fitted hearing aids and glasses can reduce these risks.









