

Here's what you can do...



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Worried about your memory?

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Introduction

Alzheimer's disease is the major cause of dementia and is associated primarily with loss of memory. But both Alzheimer's disease and the other causes of dementia have symptoms that not only involve memory but also difficulty in recalling words, planning and organising, and mood swings. All these impact on an individual's capacity to carry out the everyday activities of daily life.

This publication focuses on memory. Most of us worry about our memory from time to time – at any age – but certainly more so as we get older. In this information-rich age we hear a lot about memory and quietly wonder whether our memory lapses are something that we should be concerned about... indeed, we may wonder if there is anything we can do about it anyway.

At Dementia Australia we are often asked questions or told stories similar to the following:

'I know something, but I just can't recall it.'

'It takes me a long time to remember something.'

'I recently had a worrying experience when I couldn't find my car in the car park.'

'I'm introduced to someone and the next second I can't remember their name – it's embarrassing.'

This booklet may help to answer some commonly asked questions.

So, what is 'normal forgetfulness' and what can you do if you are worried about your memory? The answers are rarely simple, but we can endeavour to be better informed about the stages of memory and what happens as we age. Perhaps the critical question you need to consider is whether you feel that you can no longer function with confidence in your daily life.

It may be that you have less need to be worried than you think. But, if after reading this booklet you do feel concerned about your memory, the problems you face organising your life, finding the right word or other cognitive issues, then talking to your doctor is a good starting point.



'Is my forgetfulness a sign of dementia?'

About the brain

When considering your memory and its capability, it is useful to have a basic understanding of how your brain works, and how this relates to the functioning of your memory. How the brain behaves in health and disease is the great challenge to medicine in the 21st Century. There is no cure for Alzheimer's disease or the other causes of dementia, and it is better to think in terms of reducing risk, because once the damage is done it may be difficult to repair. We now know a lot about the changes that take place in the brain with dementia and also know that they take place over many years before diagnosis.

Research has provided us with the evidence about what constitutes good support and care for people with dementia, the factors that may help to reduce the risk of dementia, and the strategies that may eventually modify progression of the disease and delay onset through medical interventions.



The brain helps us to:

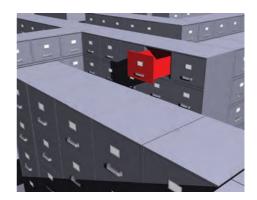
- plan and organise things
- make decisions
- understand information
- solve complex problems and do calculations
- pay attention
- behave properly
- remember things
- speak and communicate
- see, hear, taste, smell and feel
- read and write
- recognise people and objects
- find our way
- breathe
- control our body temperature

Given that the brain performs so many complex and sophisticated roles it is not surprising that from time to time some aspects of its performance, such as memory, may not be perfect.

How memory works

Memory is not a single 'thing' – it involves acquiring, storing and recalling information and images, each of which are complex processes. Memory is who we are – a filing cabinet where all our life experiences are stored.

First, we need to get our thoughts into our filing cabinet as data. We have to acquire memories, and we do this by using a range of techniques that we are all familiar with – we pay attention, we store information that will be useful to us, we absorb memories through experiences and in many other ways¹.



Some information goes into a small temporary store and can be referred to as 'immediate memory'. This is like your in-tray on top of the filing cabinet. Some of this information will be later stored in the filing cabinet as 'enduring memory' and some of it (a lot of it!) you don't bother to keep. Your 'memory in-tray' can only hold a limited amount of information and the next information you put in will wipe out what was there before, compared to your enduring storage, which has no capacity limitations.

Now, if you want to keep some of the information in your 'memory in-tray', like a phone number, you have to move that information into your 'memory filing cabinet'. To do this you have to 'process' the information, and we do this by using various techniques such as repeating the phone number to ourselves, or splitting a phone number into two groups so that we don't have to remember all of the numbers, or picturing what the number looks like, or making up some sort of rhyme about the phone number. Sometimes we collect new memories without realising that we may need them later.

There are many different suspension files or tabs that we use to store information, and some people have better systems than others. It appears that information may be more difficult to retrieve if it hasn't been processed in a meaningful and well-organised way.

¹ This introduction draws on: Delys Sargeant and Anne Unkenstein, Remembering Well: How memory works and what to do when it doesn't, Allen and Unwin, Second edition, 2001

So, how do we retrieve and recall memories when we need them? Sometimes we recall them by 'association'- like when you smell a certain perfume and it reminds you of your grandmother. There are many other ways of recalling memory, including by recognition, and by free and cued recall, which are referred to in Sargeant and Unkenstein's book (the full reference is in the footnote on previous page).

The way in which we undertake these tasks, often without an awareness of the process, differs from person to person and so there is no single measure of the effectiveness of our memory. Our memory is influenced by many factors, and there is wide variability between all of us in how we process and store our data.

Memories for procedures such as remembering how to ride a bicycle. the sounds of particular music, familiar or favourite smells, what you see and what you read are stored differently. Short-term memory is more vulnerable to decline with age and dementia, while long-term memory extending back to childhood is more resilient, and may even become clearer with age.



What happens to memory as we age?

Physical changes occur in our brains as we age, including some loss of brain cells and the connections between them. Our brains may work more slowly and less efficiently, but the extent of change varies from person to person.

It is normal for some changes to occur in our memory and thinking. For example, you might be a little more forgetful than you used to be, or not as quick in your thinking as you previously were. It might require a little more effort to remember something or to work something out in your mind than it once did.

As we grow older it may be harder to pay attention to several things at the one time, to learn new things, to recall names and nouns and to remember information. Commonly, older adults report that they forget names (83%), lose things (60%), forget things (53%), forget directions (41%) or forget appointments (34%).² This is all normal and is called 'age-related cognitive decline'. Some older people will experience a significant amount of decline and others not much at all.

As we get older, we might take more time to learn new things, but we maintain strengths in some aspects of our memory, and we often become more strategic with our remembering.³

Remember: as we get older memory change is the most common complaint most of us make, and most of us do not have dementia.



Commonly in older adults:
83% forget names
60% lose things
53% forget things
41% forget directions
34% forget appointments

² Bolla KI, Lindgren KN, Bonaccorsy C, Bleecker ML. (1991) Memory Complaints in Older Adults Fact or Fiction? Archives of Neurology, 48(1):61–64.

³ Delys Sargeant and Anne Unkenstein, Remembering Well: How memory works and what to do when it doesn't, Allen and Unwin, Second edition, 2001.

What causes memory problems?

Memory issues become a problem if they significantly disrupt vour everyday life.

Many factors may affect memory loss, and many of these are not related to dementia. These include stress, anxiety, pain, grief, some medications and fatique.

In addition, several medical conditions may affect memory, and these also are not related to dementia. Such conditions include hormone changes. nutritional deficiencies, dehydration, depression, liver or kidney disease and sensory loss.

If you are concerned, it is important that you request a comprehensive medical assessment to identify the cause of your memory loss. Many of these memory-related issues can be fully resolved with treatment that might include lifestyle management, counselling support and/or medication.

When you should worry about your memory

First, ask yourself if any of the suggested causes of memory problems listed in the previous section might be affecting your life.

You may need further support if you are experiencing some of the following problems:

- repeatedly misplacing things
- trouble remembering recent events
- trouble remembering the day and date
- difficulty following a story line
- difficulty adjusting to changes in routine
- difficulty thinking through problems
- difficulty following conversations
- difficulty handling financial matters
- difficulty in remembering familiar routes home or to work
- family and friends are commenting on your poor memory

If you are experiencing some of these problems, and frequently, you would be wise to make an appointment with your doctor.

What you should ask your doctor

Unfortunately, there is not a single medical test that can show whether or not someone has dementia. Diagnosis is based on a clinical judgement and may not necessarily establish whether a person has Alzheimer's disease or some other cause of dementia.

The doctor will form an opinion and diagnosis by talking to you, and perhaps a relative or friend, about the concerns you hold about your memory and thinking.

During your visit you should:4

- take a list of your concerns with you as this will provide a useful basis for further discussion and tests
- talk about your concerns openly and honestly, including how long you
 have been experiencing these problems and whether they have become
 more of an issue over time
- take a list of the medications that you are taking, including the doses (or bring all of them with you including your tablets, inhalers, creams, herbal medications and vitamins)

Remember that you can:

- ask for a longer appointment
- take a relative or friend with you
- ask questions and request further explanations if you don't understand
- take notes during the visit
- discuss the option of further assessment by a specialist

You may need a physical and neurological examination to identify the possible causes of any memory problems. Your doctor may refer you to a specialist in the diagnosis of cognitive issues, such as a geriatrician, psychiatrist or a neurologist. Your specialist may request further assessment by a neuropsychologist. Doctors use a number of different tests and assessments to determine whether symptoms fit certain criteria and to rule out other possible causes of the symptoms you may be experiencing.

⁴ For further information see: Dementia Australia, **Tests used in diagnosing dementia** Dementia Q&A sheet 10, Reviewed 2014. Alzheimer's Australia, **Timely Diagnosis of Dementia: can we do better?** Paper 24, 2011. Both available at dementia.org.au

An assessment for dementia may include several of the following:

- a review of your personal history
- physical examination and laboratory tests, including blood and urine tests
- · memory and mental abilities tests
- radiological tests, such as brain imaging

If these assessments are required you may wish to ask your doctor:

- What tests will be conducted?
- Who will be performing these tests, and how long will it take?
- Should I prepare for the tests in any way?
- Will any of the tests involve pain or discomfort?
- Will there be a cost involved?
- What follow-up will be necessary, and who will perform the follow-up?
- How will I be informed of the test results and the diagnosis?
- Who else will be told of my results and diagnosis?
- Will my GP be given information about me? (if you are seeing a specialist)

Most of us want an immediate and definitive diagnosis, but in the case of memory concerns there may be a number of possible explanations. This process can be frustrating, but please be patient and don't expect an immediate answer.



There are many possible causes of changes in memory

Mild cognitive impairment and dementia

The diagnosis of cognitive conditions is becoming progressively more accurate and sophisticated. Nevertheless, it is still sometimes difficult for doctors to seperate the early symptoms of Alzheimer's disease and other forms of dementia from the cognitive changes associated with ageing. (Cognition or cognitive functions refers to the brain's ability to reason, plan, reflect, remember, find words, find one's way and perform a variety of other thinking functions). For your reference, some of the distinctions are discussed below.

Mild Cognitive Impairment

Mild cognitive impairment (MCI) is a condition that causes a slight but noticeable decline in memory or other thinking skills, also known as cognitive abilities. These changes can be measured using memory and other tests, and are serious enough to be noticed by the individuals experiencing them and/or by family and close friends. However, they will generally not prevent people from going about their daily lives and activities. People with MCI have more memory or other thinking problems than would be expected from someone at a similar age and show some decline in their cognitive skills, but these declines are not pronounced enough to meet diagnostic criteria for Alzheimer's disease or another type of dementia.⁵

About one third of people with MCI develop a progressive decline in their thinking abilities over time, and Alzheimer's disease is usually the underlying cause of this.⁶

Dementia

Dementia is the term used to describe the symptoms of a large group of illnesses which cause a progressive decline in a person's functioning. It is a broad term that describes a decline in memory, intellect, social skills and what would be considered normal emotional reactions.

There are many forms of dementia, with Alzheimer's disease being the most common. Other forms of dementia include: vascular dementia; dementia with Lewy bodies; frontotemporal dementia; and many other rare conditions.⁷

⁵ Dementia Australia Mild Cognitive Impairment Other Information Help Sheet 1 @2014

⁶ Alzheimer's Association (USA) Facts and Figures 2016. https://www.alz.org/documents_custom/2016-facts-and-figures.pdf

⁷ Dementia Australia What is dementia? About Dementia Help Sheet 1 © 1999 Reviewed 2017 www.dementia.org.au

10 signs of dementia

Memory-related changes that disrupt daily life are not a typical part of ageing. If you notice any of the signs listed below you **should consult your doctor.** The following '10 Signs of Dementia' were developed by the Alzheimer's Association [USA]⁸ and refer to Alzheimer's disease – however, many of these signs also apply to other forms of dementia.

Memory loss that disrupts daily life

One of the most common signs of Alzheimer's disease is memory loss, especially forgetting recently learned information. Others include forgetting important dates or events; asking about the same information over and over; relying on memory aids or family members for things they used to handle on their own.

Challenges in planning or solving problems

Some people may experience changes in their ability to develop and follow a plan or to work with numbers. They may have trouble following a familiar recipe or keeping track of monthly bills. They may have difficulty concentrating, and tend to take much longer to do things they did before.

Difficulty completing familiar tasks at home, at work or at leisure

People with Alzheimer's disease often find it hard to complete daily tasks. Sometimes, people may have trouble driving to a familiar location, managing a budget at work or remembering the rules of a favourite game.

Confusion with time or place

People with Alzheimer's disease can lose track of dates, seasons and the passage of time. They may have trouble understanding something if it is not happening immediately. Sometimes they may forget where they are or how they got there.

Trouble understanding visual images and spatial relationships

For some people, having vision problems is a sign of Alzheimer's disease. They may have difficulty reading, judging distance and determining colour or contrast. In terms of perception, they may pass a mirror and think someone else is in the room. They may not realise that they are the person in the mirror.

⁸ Alzheimer's Association (USA)10 Signs of Dementia: www.alz.org/alzheimers_ disease_10_signs_of_alzheimers.asp

New problems with words in speaking or writing

People with Alzheimer's disease may have trouble following or joining a conversation. They might stop in the middle of the conversation and have no idea how to continue, or they might repeat themselves. They may struggle with vocabulary, have problems finding the right words or call things by the wrong name (e.g. they might call a watch a hand-clock).

Misplacing things and losing the ability to retrace steps

A person with Alzheimer's disease might put things in unusual places. They may lose things and be unable to go back over their steps to find them again. Sometimes, they may accuse others of stealing. This could occur more frequently over time.

Decreased or poor judgement

People with Alzheimer's disease may experience changes in judgement or decision-making. For example, they might use poor judgement when dealing with money, such as giving large amounts to telemarketers. They also could pay less attention to their grooming or keeping themselves clean.

Withdrawal from work or social activities

A person with Alzheimer's disease may start to withdraw themselves from their hobbies, social activities, work projects or sports. They could experience trouble keeping up with a favourite sports team or remembering how to complete a favourite hobby. They may also avoid being social because of the changes they have experienced or because they feel embarrassed.

Changes in mood and personality

The mood and personalities of people with Alzheimer's can change. They can become confused, suspicious, depressed, fearful or anxious. They may be easily upset at home, at work, with friends, or in places where they are out of their comfort zone. They may become more rigid, and some previous character traits could become exaggerated.

Strategies you can adopt if you are concerned about your memory

We are all different and there is no simple solution that applies to all of us. The strategies that you may find helpful will depend on the nature of your memory issues, your lifestyle, your attitudes and beliefs, and the support available to you as well as other factors. We all use memory strategies in some form or another, but if you are experiencing more persistent memory issues you may wish to consider being more systematic with these strategies in your daily life.

Some useful memory strategies that are widely used to improve memory in general include 9:

- Concentrate we often under-use our ability to concentrate on something. Develop a habit of paying close attention.
- Repetition repeat to yourself and rehearse what you want to remember.
- **Don't overload** switching from one subject to another may become more difficult as we get older. Try to work with just one set of information at a time.
- Reduce the amount of information to be learned one technique is to break up a list of tasks (or names) into sub-groups and learn those, rather than attempting to remember all of the items on the list.
- Make a mental picture envisage what you need to remember, such as an identifiable feature near where you parked your car.
- Use pattern recognition or try to visualise what **you are trying to remember** – for example, you might be able to picture in your mind where various items are located in a supermarket.
- Make associations you might be able to associate person's name with a rhyme or a colour or a shape.

Use the strategies that work best for you and practice them



⁹ McKhann and Albert M, Keep Your Brain Young: the complete guide to physical and emotional health and longevity John Wiley & Sons, New Jersey 2002

If your memory concerns are more persistent, you may need to consider using some 'back-up' strategies to support your memory.

Some of these include¹⁰:

- Making lists most of us use lists on occasions, but you may now need to make lists a part of your everyday routine.
- Use a diary it can be helpful to use a diaryto help recall significant dates, such as family members' birthdays, times and appointments.
- Organise important things put things (such as car keys) in the same place each time.
- Maintain routine maintaining familiar routines may lessen the load on memory.
- Plan ahead allow more time to get to appointments in unfamiliar places. Plan ahead and write down step-by-step directions.

If you do have early stage dementia, you may need to adopt additional strategies (such as labelling rooms or items) or call on the support of someone to assist you to remember.



10 Delys Sargeant and Anne Unkenstein, Remembering Well: How memory works and what to do when it doesn't, Allen and Unwin, Second edition, 2001, pp.68-78

How you can protect your brain

Many people are not aware of the links between physical health and brain health. That's why we like to say what's good for the heart is good for the brain. Growing evidence suggests that there are things we can do in our everyday lives to reduce the risk of developing dementia.

Being brain healthy is important at any age. You're never too young or too old to look after your brain health.

There are five simple steps we can all take to maximise our brain health:



Step 1: Look after your heart

Maintain healthy levels of blood pressure, cholesterol. blood sugar and body weight, and avoid smoking. Speak to your GP and follow their advice.



Step 2: Be physically active

Try to participate in a range of physical activities that you enjoy on a daily basis.



Step 3: Mentally challenge your brain

Feed your brain by learning new things throughout life.



Step 4: Follow a healthy diet

Eating a healthy, balanced diet is good for heart health and brain health.



Step 5: Enjoy social activity

Socialising has great benefits to brain health. Even better, try to combine mental, social and physical activities together for added benefit.

Being brain healthy is important at any age, but it's particularly important during midlife as this is when certain changes start to occur in the brain.

There are no guarantees however, as dementia cannot yet be prevented or cured. Research evidence suggests that living a brain healthy life will give you the best chance of not developing dementia.

Glossary About dementia

Dementia

Dementia is the term used to describe the symptoms of a large group of illnesses that cause a progressive decline in a person's functioning. It is a broad term that describes a loss of memory, intellect, social skills and what would be considered normal emotional reactions. For a long time, the person may look healthy, but on the inside their brain is not working properly. Dementia is not a normal consequence of ageing.

Alzheimer's disease is one of the major causes of dementia, but there are many others.

Alzheimer's disease

Alzheimer's disease is the most common form of dementia. Alzheimer's disease is a physical condition which attacks the brain, resulting in impaired memory, thinking and behaviour. The basic cause of this progressive, degenerative condition remains unclear.

Vascular dementia

Vascular dementia is caused by damage to blood vessels in the brain. Strokes and mini-strokes can cause vascular dementia, as can poor circulation of blood to the brain. It is common for the brains of people with dementia to have both Alzheimer and vascular changes.

Other dementias

There are many different forms of dementia. These include:

- frontotemporal dementia which affects behaviour and language skills
- Lewy body disease which is a type of dementia related to Parkinson's disease, affects thinking, behaviour and movement
- alcohol related dementia

- HIV-associated dementia
- many other rare forms

Dementia and inheritance

Familial Alzheimer's disease is a rare form that is entirely inherited. It accounts for fewer than five per cent of all cases of Alzheimer's disease and causes younger onset dementia, occurring in people in their 40s and 50s. There is a clear family history of the disease. Some other rare forms of dementia are also entirely inherited, including some cases of frontotemporal dementia. The majority of cases of dementia are not directly inherited and likely arise from a combination of genetic and environmental factors.

Prevalence

Dementia is more common in people after the age of 65 years, and the chances of developing dementia increase significantly with age. Younger adults may also develop dementia, but this is uncommon. However, dementia is not a normal part of ageing and most old people do not develop this condition.

The estimated age-specific demential prevalence rates are:11

Age Prevalence rate

65+ 1 in 10 85+ 1 in 3

Just over 70% of people with dementia are aged 75 years and over.

In 2018, an estimated 425,000 people have dementia in Australia. Without any medical breakthroughs this number is projected to reach more than 1.1 million by 2056¹¹.



About Dementia Australia

Dementia Australia is the national peak body for people, of all ages, living with all forms of dementia, their families and carers. It provides advocacy, support services, education and information.

Our vision is a society committed to the prevention of dementia while valuing and supporting people living with dementia.

Dementia Australia is an advocate for people with dementia, their families and carers and encourages those with dementia, their families and carers to share their experiences and take part in advocacy opportunities.

To find out how you can help visit dementia.org.au

A future without dementia

While there have been major advances in recent years in understanding dementia, we do not yet know how to stop or delay the progression of dementia.

Current research in Australia and around the world has made advances in understanding brain diseases that cause dementia, better ways to manage the condition and how to improve quality dementia care. It is important that this research continues, to develop better methods of diagnosis and new treatments to delay progression of the disease. The answer lies in more investment in research.

To find out more about current research projects, and how you can help, go to dementia.org.au/research

National Dementia Helpline 1800 100 500

Helpline is funded by the Australian Government

dementia.org.au