



Alzheimer's
Australia SA
Living with dementia

Dementia Reducing the risks

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- Is it dementia?
- What is dementia?
- What can we do?

We all forget things ...

- Forget names
- Lose things
- Forget phone numbers
- Forget directions
- Forget appointments

That is normal...

Memory may be influenced by

Pain

Fatigue

Grief

Stress

Anxiety

Medications

Hormone changes

Nutritional deficiencies

Dehydration

Depression

Infection

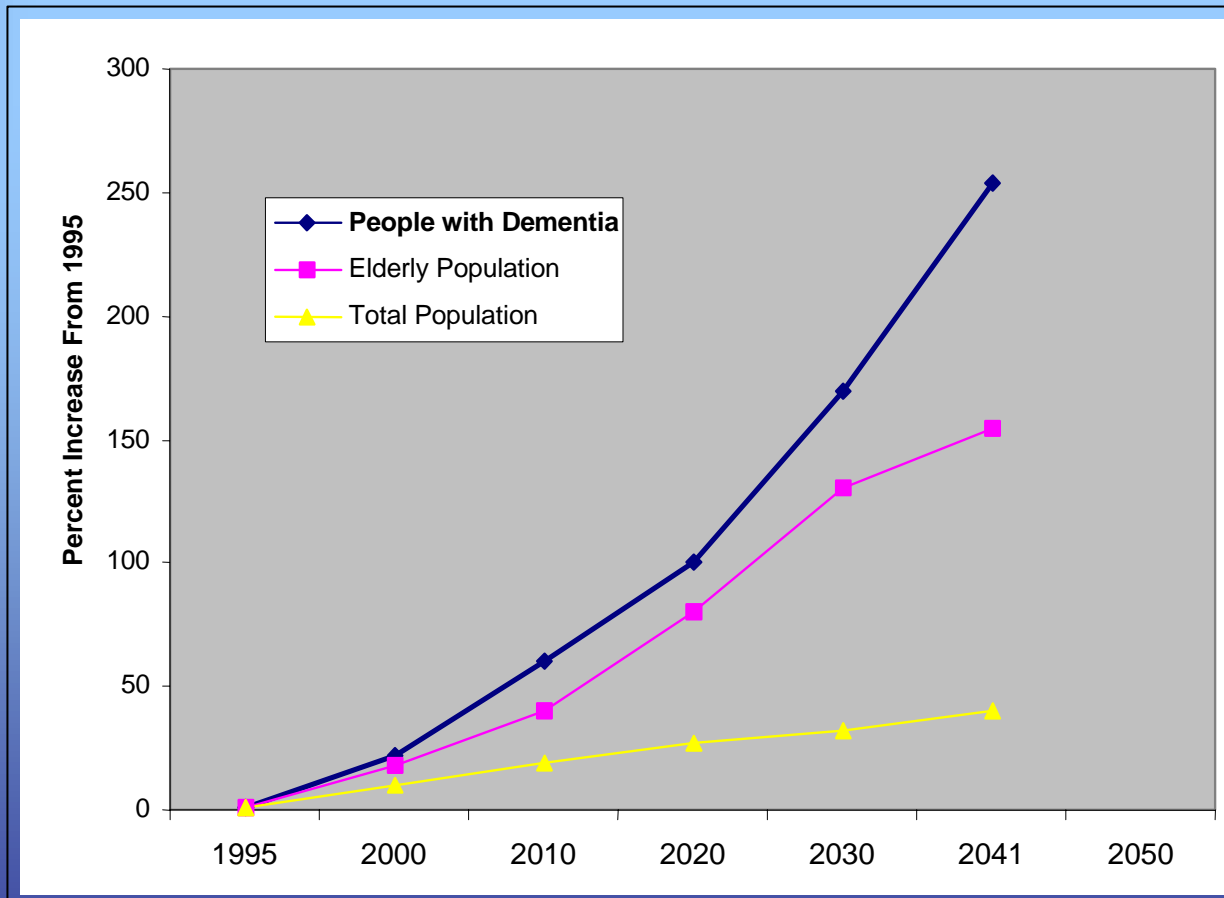
Anaemia

Sensory Loss



Changes in cognition,
that is in memory and
other mental functions is
not always a sign of
dementia

Dementia epidemic



**under 65 yrs
1 in 1000**

**over 65 yrs
1 in 20**

**over 80 yrs
1 in 4**

**2005
200,000 1%**

**2040
730,000 2.8%**

Projected increase in dementia cases, elderly population & total population in Australia 1995-2041 (Henderson & Jorm 1998)



Brain structure & function

Frontal Lobes

- 1) Planning, organising, problem solving, decision making
- 2) Memory,
- 3) Starting and stopping actions
- 4) Personality
- 5) Regulating social behaviour
- 6) Speech

Parietal Lobes

- 1) Language
- 2) Reading
- 3) Spatial perception
- 4) Touch & pressure: judgment texture, weight, size, shape
- 5) Patterned behaviour

Limbic System

The emotional centre of the human nervous system. The place for linking memories, emotions and behaviours, also regulating sleep and eating patterns

Occipital lobe

- 1) Visual reception
- 2) Recognition of shapes & colours

Temporal Lobes

- 1) Short term memory
Sorting new information
- 2) Long term memory (includes remembering what is read, seen or heard)
- 3) Distinguishing sound & smell



Dementia is ...

- a syndrome
- one or a combination of diseases that affect the brain
- chronic or progressive nature
- disturbance of multiple brain functions,
 - memory, thinking, orientation, comprehension, calculation, learning capacity, language and judgment
- interferes with social or occupational functioning

Types of dementia

- Alzheimer's disease
 - insidious onset, characterised by plaques and tangles in the brain, loss of brain tissue and reduction of transmission of messages
- vascular dementia
 - abrupt onset, vascular damage, stroke – silent infarcts, damage patchy , insight may remain
- fronto-temporal lobe dementia
 - onset commonly 45 – 65 years can be younger, strong genetic component, insidious course & early predominance of changes in personality and behavioural symptoms,
- dementia with lewy bodies
 - formation of intracellular bodies, presentation similar to AD but visual, auditory hallucinations, delusions, and paranoia more prominent, muscle rigidity & falls are common - impairment can fluctuate
- alcohol related dementia
- mixed dementias
- up to 100

Diagnostic criteria

Development of multiple cognitive deficits manifest by

- Memory impairment

And one or more of the following cognitive disturbances:

- Language disturbance
- Impaired ability to carry out motor functions
- Failure to recognise or identify objects
- Disturbance in executive functioning (i.e. planning, organising, sequencing, abstracting)

American Psychiatric Association 1994

Each person is unique

- Personality
- Life History
- Physical Health
- Neurological changes
- Psycho-social environment

Dementia is a syndrome resulting from diseases that damage the brain



Some symptoms are common but everyone reacts to the experience in their own way

Risk reduction

- currently not possible to prevent or cure dementia but much research on both areas
- increasing body of evidence to support a range of lifestyle strategies as a means of reducing the risk of developing dementia

Woodward et al 2005

Risk factors

Alzheimer's Disease

- Old age
- Genetic mutations (rare)
- Genetic factors
 - Down syndrome
 - Apolipoprotein E status
- Family history of AD
- Head injury
- Head size (small)
- Vascular risk factors
- Fatty diet
- Depression
- Female gender

Vascular dementia

- Old age
- Male
- Hypertension
- Stroke
- Family history
- Diabetes, type 2
- Elevated cholesterol
- Smoking
- Obesity
- Elevated homocysteine (amino acid in the blood)
- Cardiac disease

Reduce risks

Evidence favourable but more research needed

Eat
protective
foods

- Good cholesterol foods e.g. olive oil, avocados, nuts, seeds, fish
- Omega-3 fatty acids e.g. soy oils, canola margarines, fish
- Antioxidant rich foods e.g. prunes, blueberries, spinach
- Antioxidant rich drinks Green tea, tea, red wine
- Sufficient vitamins – especially E
- Drink 6-8 glasses of water a day

Reduce risks

Physical activity associated with a lower risk of dementia and cognitive decline

Exercise
your body

- Increases blood flow to the brain: heart disease, stroke and diabetes less likely
- Maintains flexibility and balance
- Resistance or weight training for strength, coordination and bone density

Reduce risks

Social and intellectual activities may stimulate nerve growth and survival

Maintain
social and
intellectual
activities

- Visit friends and relatives
- Clubs and groups
- Laugh
- Read
- Go to classes
- Engage in conversation
- Community or volunteer work
- Mind games, crosswords, chess, cards
- Read, write, converse
- Plays, concerts, museums
- Hobbies

Reduce risks

Risk factors are modifiable through medication or lifestyle changes

Health checks

- Body weight
- Blood pressure
- Cholesterol
- Blood sugar levels



Good evidence to support lifestyle strategies as a means of reducing your risk of developing dementia



Alzheimer's
Australia SA
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Alzheimer's Australia SA Inc was established in 1983 to provide a wide range of vital services for people with various forms of memory loss and dementia, and support for carers, families and friends.



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For information, to make a donation or
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