

**Herbal Medicine for the Brain -  
Presented to Beverley U3A on Thursday 19th February 2026  
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Thank-you for attending the presentation, this is a brief summary of some of the points from the talk, along with some references for scientific studies on the herbs we discussed.

These notes accompany the slide presentation.

### **Dementia and Alzheimers**

Dementia is an umbrella term that refers to a number of conditions, including: Alzheimer's Disease, Vascular Dementia, Lewy bodies, and Frontotemporal Dementia.

Many people also experience Mild Cognitive Impairment, which may be the early stages of dementia, or may remain MGI.

Drivers/risk factors for these conditions include: ageing, genetics, neuroinflammation & lack of clearance of metabolic waste, hypoxia/poor cerebral circulation, poor vascular endothelial health - there is much crossover between cardiac risk factors and risk factors for dementia, and I can't stress enough the importance of healthy blood pressure and importance of sleep.

Viruses such as Epstein Barr and Herpes are also considered potential risk factors, and the shingles vaccine has been shown to be protective against dementia.

Also be mindful of air pollution and blows to the head!

Not dementia, but a link has been found between pesticide exposure and Parkinson's disease.

<https://www.sciencedirect.com/science/article/pii/S0045653525002905>

### **Diet and lifestyle factors that protect us from dementia**

The [Alzheimer's Association](#) recommends "10 Healthy Habits for Your Brain" that may help reduce the risk of cognitive decline and Alzheimer's disease by focusing on modifiable lifestyle factors:

- 1. Break a Sweat (Physical Activity):** Engage in regular cardiovascular exercise that elevates your heart rate and increases blood flow to the brain and body.
- 2. Hit the Books (Formal Education):** Continue to learn new skills or take classes throughout your life to reduce the risk of cognitive decline.
- 3. Butt Out (Smoking Cessation):** Quitting smoking can reduce your risk of cognitive

decline to levels comparable to those who have never smoked.

4. **Follow Your Heart (Heart Health):** Manage cardiovascular risks such as high blood pressure, diabetes, and high cholesterol, as they negatively impact brain health.
5. **Heads Up! (Protect Your Brain):** Prevent head injuries by wearing a seatbelt, using a helmet for sports, and taking steps to prevent falls.
6. **Fuel Up Right (Healthy Diet):** Consume a diet that is lower in fat and higher in vegetables and fruits, such as the Mediterranean or MIND diets.
7. **Catch Some Zzz's (Sleep Well):** Get enough quality sleep to avoid issues with memory and thinking, and treat sleep-related issues like sleep apnea.
8. **Take Care of Your Mental Health (Stress/Depression):** Seek treatment for depression and manage stress, as these have been linked to an increased risk of cognitive decline.
9. **Buddy Up (Social Engagement):** Stay socially active and connected with family and friends to support brain health.
10. **Stump Yourself (Mental Stimulation):** Challenge your mind by learning something new, working on a puzzle, or engaging in creative hobbies.

**Mediterranean-DASH Intervention for Neurodegenerative Delay diet**, or more commonly, the **MIND diet**, combines portions of the [DASH \(Dietary Approaches to Stop Hypertension\) diet](#) and the [Mediterranean diet](#).

The best diet for brain health is **the MIND diet**—a hybrid of the Mediterranean and DASH diets—which emphasizes leafy greens, berries, nuts, olive oil, whole grains, and fatty fish while limiting red meat, butter, and sweets. Research suggests this nutrient-dense approach reduces inflammation, slows cognitive decline, and lowers the risk of Alzheimer's disease.

### Key Components of a Brain-Healthy Diet

- **Leafy Greens & Vegetables:** Kale, spinach, broccoli, and collards are rich in vitamin K, lutein, and folate.
- **Berries:** Blueberries and strawberries are specifically noted for improving memory and brain function.
- **Healthy Fats:** Olive oil, avocados, and nuts (especially walnuts) provide essential fats and antioxidants.
- **Fatty Fish:** Salmon, cod, and mackerel provide Omega-3 fatty acids that lower cognitive decline, ideally consumed twice a week.
- **Whole Grains:** Oats, quinoa, and brown rice.
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### Foods to Limit

- Red meat, butter, margarine, cheese, fried foods, and sugary snacks.

The MIND diet and similar, consistent, healthy eating patterns are proven to protect the brain over the long term, rather than relying on a single "superfood".

A recent study on coffee and tea:

[https://www.medscape.com/viewarticle/coffee-and-tea-may-protect-against-dementia-hold-decaf-2026a100046l?ecd=WNL\\_t5fy\\_ous\\_gb\\_etid8107173260215\\_1&uac=429539HT&impID=8107173](https://www.medscape.com/viewarticle/coffee-and-tea-may-protect-against-dementia-hold-decaf-2026a100046l?ecd=WNL_t5fy_ous_gb_etid8107173260215_1&uac=429539HT&impID=8107173)

## **Herbs:**

### **Turmeric**

Turmeric modulates inflammation, and is antioxidant. It crosses the blood brain barrier. Turmeric, specifically its active compound [curcumin](#), supports brain health by reducing neuroinflammation, lowering oxidative stress, and potentially inhibiting amyloid-beta plaque buildup associated with Alzheimer's disease. It may improve memory, focus, and cognitive function in older adults. For maximum benefit, consume with black pepper (increases absorption by 2000%) or fats.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC2781139/>

### **Ginkgo biloba:** *from [www.herbalreality.com](http://www.herbalreality.com) - a wonderful collection of resources on herbal medicine*

Concentrated ginkgo extracts can be used to improve blood flow, tissue oxygenation and nutrition, and to protect nervous tissue. They enhance memory and cognitive function, especially in the elderly and have also been used in some cases of tinnitus, dizziness and headaches. Some symptoms of atherosclerosis such as intermittent claudication (pain in the lower legs on walking even short distances) may also be relieved. Ginkgo extract has been taken as a supplement to reduce the risk of cardiovascular disease, to improve retinal blood flow and as a remedy to manage glaucoma and age-related macular degeneration.

The extract has also been shown to reduce the impact of a range of stressors and to reduce anxiety and depression.

While ginkgo nuts are used in traditional Chinese medicine (for lung and kidney ailments), the modern use of the green leaf is entirely due to scientific discovery. In the 1960s a

group of German scientists set out to investigate the effects of novel herbs on circulation. In traditional German healthcare circulatory disturbances have been default explanations for a wide range of illnesses, including ageing and cognitive decline. Perhaps attracted by the heart-shaped leaves (*Herz* is the key circulatory metaphor in German culture) they investigated further and developed a concentrated ginkgo extract. This was standardised for flavonoid content and patented soon after.

**Sage:** from [www.herbalreality.com](http://www.herbalreality.com) - a wonderful collection of resources on herbal medicine

Sage inhibits the enzyme acetylcholinesterase (AChE) which breaks down one of the brain's chemical messengers, acetylcholine. AChE inhibitors have a wide range of therapeutic actions relating to cognitive and behavioural symptoms. This, in part, demonstrates how sage positively improves symptoms of mood disorders, such as anxiety and depression, and helps memory — owing to the important role that acetylcholine plays in memory function. Sage is able to bring about a sense of calmness, clarity and positivity .

Sage has also been shown to enhance cognitive function and reduce agitation in Alzheimer's patients. Sage is a herb that is, therefore, indicated in neurodegenerative conditions and for the treatment of Alzheimer's disease. These actions are thought to be related to a synergistic effect of sage's volatile oils and undoubtedly a number of its other compounds.

### **Effects of cholinesterase inhibiting sage (*Salvia officinalis*) on mood, anxiety and performance on a psychological stressor battery**

A double-blind, placebo-controlled, crossover study was carried out to investigate the effects of sage for mood, anxiety and performance. Thirty healthy subjects participated on three separate days, seven days apart. Each time receiving a different treatment in counterbalanced order on each occasion (placebo, 300 or 600 mg dried sage leaf). This study was carried out in part, to further backup a concomitant investigation where an extract of the sage leaf exhibited dose-dependent, *in vitro* inhibition of acetylcholinesterase and butyrylcholinesterase, which may have implications for improvements in mood and cognition.

Mood was assessed both pre-dose and at one and four hours post-dosing. The study confirms that both doses of sage led to improved ratings of mood in the absence of the stressor. There was an interesting dose dependent effect; the lower dose reduced anxiety, the higher dose increased feelings of alertness, calmness and contentedness.

Task performance was improved for the higher dose at both post dose assessments, but

reduced for the lower dose at the later testing session. The results confirm previous observations of the cholinesterase inhibiting properties of *S. officinalis*, and improved mood and cognitive performance following the administration of single doses to healthy young participants (10). These activities are thought to be associated with a synergistic effect of volatile oil components in sage (14).

***Salvia officinalis* extract in the treatment of patients with mild to moderate Alzheimer's disease: A double blind, randomised and placebo-controlled trial**

A double-blind, randomised and placebo-controlled trial was carried out to investigate the efficacy and safety of sage extract using a fixed dose (60 drops/day), in patients with mild to moderate Alzheimer's disease. Patients were aged between 65 and 80 years old with a score of less than 12 on the cognitive subscale of Alzheimer's Disease Assessment Scale (ADAS-cog) and less than or equal to two on the Clinical Dementia Rating (CDR).

Participants were randomised to placebo or fixed dose. The study took place over a four month period.

The extract produced a significantly better outcome on cognitive functions than the placebo group (ADAS-cog:  $F=4.77$ ,  $d.f.=1$ ,  $P=0.03$ ), (CDR-SB:  $F=10.84$ ,  $d.f.=1$ ,  $P<0.003$ ).

The study concludes that sage effectively helps in cases of mild to moderate Alzheimer's disease. The study also found that the sage group showed reduced agitation (15).

**The effect of *Salvia officinalis* on hot flashes in postmenopausal women: A systematic review and meta-analysis**

This systematic review was carried out amongst randomised clinical trials involving human subjects between 1990 and 2023 to explore the effect of *Salvia officinalis* on hot flashes. It was specifically looking at whether *S. officinalis* impacted the severity, frequency or duration of hot flashes in postmenopausal women. A total of four articles were included after the exclusion criteria.

One trial found daily consumption of 100 mg of the herb over eight weeks was successful in reducing the frequency of hot flashes. Further studies concluded that the severity of hot flashes was only reduced after treatment lasting 12 weeks. This review also found limited side effects and recommended *S. officinalis* can be used effectively for the reduction of hot flashes (16).

**Rosemary - from [www.herbalreality.com](http://www.herbalreality.com) - a wonderful collection of resources on herbal medicine**

As Shakespeare reminded us in Hamlet, rosemary was known as the herb of remembrance, and was placed at burial sites to ensure that the memory of the departed would not be lost by their loved one.

Rosemary is a warming and uplifting herb, evoking a tonifying and clarifying action on the mind, digestion and joints. Breathing in the scent of rosemary is known to lift low moods and bring about a sense of clarity and awareness. Traditionally, its bitter action on the liver was known to alleviate 'liverishness' associated with an accumulation of yellow bile and feelings of malaise. Its warming quality makes it useful in treating conditions associated with cold, including colds, flus and coughs or illness that manifests as chills or shivers (6). Rosemary is pungent, aromatic and stimulating. It improves blood supply to the digestive, nervous and musculoskeletal systems, removing congestion and chronic inflammation. The volatile oil rosmarinic acid, calms digestive irritation whilst stimulating metabolism, specifically in the breakdown of fats.

Rosemary has long been known for 'remembrance', supporting memory and cognition. It also has protective connotations and has been used to ward off negativity and promote a sense of renewal and clarity.

#### **Effects of continuous intake of rosemary extracts on mental health in working generation healthy Japanese men: Post-hoc testing of a randomised controlled trial**

An initial clinical trial was carried out, however this follow up explored rosemary in those with more severe depression as the initial trial was classified as mild. This post-hoc analysis was carried out amongst those with greater mood disturbance to evaluate the effects of rosemary on mental health. The results showed a marked improvement in the rosemary group for anxiety, fatigue, daytime sleepiness and depletion, suggesting that rosemary is effective in supporting mood related disorders.

#### **Effects of *Rosmarinus officinalis* L. on memory performance, anxiety, depression, and sleep quality in university students: A randomised clinical trial**

This double-blinded randomised controlled trial was carried out to evaluate the effects of oral rosemary on depression, anxiety, memory and sleep quality in university students. All the 68 participants received 500 mg rosemary or placebo twice daily over one month. The results showed a significant reduction in depression and anxiety scores, as well as an increase in memory performance in the rosemary group compared to placebo.

#### **Gotu Kola: *from www.herbalreality.com - a wonderful collection of resources on herbal medicine***

Gotu kola is revered as a great herb for use within meditative practices because of its ability to 'open the mind'. It is a rejuvenative tonic, with particular effect upon the brain, helping to restore cerebral functioning that may have been compromised due to excess stress, trauma or illness. It will also improve cognitive functions such as memory, learning

and recall.

Gotu kola is also one of the most prominent healers in traditional medicine, used in the past to mend some of the most demanding wounds and skin problems (skin ulcers, weeping eczema and even leprosy). Unusually its benefits were as much from oral consumption as topical applications. Its systemic impact upon collagen synthesis and blood vessel repair mechanisms have made it very valuable where there has been any deep tissue damage, but also where the surface of the skin has been damaged through injury or chronic skin conditions. It was also used to reduce inflammatory damage in rheumatic and other inflammatory joint problems.

These combined properties make gotu kola an obvious remedy when stress and inflammatory problems coincide, for example in skin conditions like eczema and psoriasis, and inflammatory gut problems.

Gotu kola starts as a most impressive healing agent. Laboratory studies indicate that it promotes collagen synthesis, the tissue required to heal wounds and damaged tissue, yet also switching effect to reduce excessive fibrosis or scarring. There are similar data to show that constituents in gotu kola can significantly reduce local inflammation.

Extending out from this are indications that gotu kola improves the integrity of blood vessel walls, the endothelium, and thereby improves circulation to key tissues. There is also evidence that it can enhance inherent cellular antioxidant performance to reduce tissue damage resulting from various stresses and trauma.

These properties seem particularly important in the central nervous system and brain. Gotu kola can be seen to protect the nervous system. This combined action makes it effective where there has been any head trauma or injury and also where there may be signs of cognitive degeneration or mental fatigue.

Gotu kola has sometimes been coupled with *Bacopa monnieri* under the generic heading of 'brahmi', and both are classified in Ayurveda as medhya rasayanas, remedies that boost memory, restore cognitive deficits and improve mental function.

Various studies have shown that gotu kola extracts have a protective effect against various neurological diseases, including Alzheimer's disease, Parkinson's disease, learning and memory enhancement, neurotoxicity and other mental illnesses such as depression and anxiety, and epilepsy.

Preliminary clinical studies have shown an effect in reducing anxious responses in healthy subjects.

There have also been an uncontrolled clinical trial showing benefit in generalised anxiety disorder and improving cognitive performance.

**How would a herbalist support someone who wants to prevent dementia/**

## Alzheimer's?

- General prevention, for anybody - Ginkgo plus Turmeric, plus all the diet and lifestyle factors

- Perhaps more tailored support if someone has risk factors such as diabetes, poor sleep, depression, hypertension, history of herpes/EBV - Herbal medicine can help to treat all of these conditions.

### Here are some scientific studies on these herbs, including those mentioned above:

Ginkgo:

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Sage

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Rosemary

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## Gotu Kola

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