

I J  
C  
R M

**International Journal of  
Contemporary Research In  
Multidisciplinary**

**Research Article**

## Nurturing The Nerves: Siddha Strategies for Alzheimer's Prevention and Cognitive Vitality

 **Dr. K. Thangagomathi <sup>1\*</sup>, Dr. S. Sundararajan <sup>2</sup>**

<sup>1</sup> PG Scholar, MD (S), Dept. of Noi Naadal, Government Siddha Medical College, Palayamkottai  
Tirunelveli, Tamil Nadu, India

<sup>2</sup> Professor & HOD, Dept. of Noi Naadal, Government Siddha Medical College, Palayamkottai  
Tirunelveli, Tamil Nadu, India

**Corresponding Author:** \*Dr. K. Thangagomathi 

**DOI:** <https://doi.org/10.5281/zenodo.18299537>

### Abstract

Alzheimer's disease (AD) is a neurodegenerative disorder in humans, which is the world's most prevalent form of dementia, that leads to loss of memory and cognition, death of neurons, loss of synapses and damage to the brain, which culminates in death. As the world grapples with the rising incidence and a general concern for cognitive decline, while conventional medicine focuses on symptomatic management, siddha medicine emphasizes proactive measures to maintain the health of nervous system (Naadi mandalam) and prevent onset of debilitating conditions. In a world where Alzheimer's presents a growing challenge, the wisdom of Siddha strategies such as 1) Nithya and Kaala ozhukam (Daily & Seasonal regimens), the core idea of modifications in life style in corelation with the natural rhythms of the seasons contributes proper balance of doshas, eliminates toxins, strengthens neural connection and supports overall vitality by addressing the root causes of imbalances and contributing to preserve neuronal integrity and enhances cognitive reserve preventing AD.

### Manuscript Information

- **ISSN No:** 2583-7397
- **Received:** 13-11-2025
- **Accepted:** 23-12-2025
- **Published:** 19-01-2026
- **IJCRCM:5(1); 2026: 148-152**
- **©2026, All Rights Reserved**
- **Plagiarism Checked:** Yes
- **Peer Review Process:** Yes

### How to Cite this Article

Thangagomathi K, Sundararajan S. Nurturing the nerves: Siddha strategies for Alzheimer's prevention and cognitive vitality. Int J Contemp Res Multidiscip. 2026;5(1):148–152.

### Access this Article Online



[www.multiarticlesjournal.com](http://www.multiarticlesjournal.com)

**KEYWORDS:** Alzheimer's disease, Siddha system, Nurturing nerves, cognition, balance of humours.

## INTRODUCTION

Alzheimer's disease (AD) is a neurodegenerative disorder in humans, which is the most common form of dementing illness among middle-aged and older adults, that leads to loss of memory and cognition, death of neurons, loss of synapses and damage to the brain, which culminates in death<sup>[3]</sup>. AD is a progressive, inexorable loss of cognitive function associated with the presence of senile plaques in the hippocampal area of the brain. Although symptoms typically appear after age 60, some early-onset forms of the disease are linked to various factors in recent days, such as a specific genetic defect. Although the aetiology is unknown, genetic factors clearly play a role in 10% to 15% of cases<sup>[3]</sup>.

As the world grapples with the rising incidence and a general concern for cognitive decline, while conventional medicine focuses on symptomatic management, Siddha medicine emphasises proactive measures to maintain the health of the nervous system (Naadi mandalam) and prevent the onset of debilitating conditions at an early stage.

Siddha system of medicine views AD and age-related cognitive decline as an imbalance primarily in Vatham (the humour associated with movement, nervous function, and ether/ air elements). Hence, the strategies aim to balance vatham, clearing toxins, nourishing the brain and promoting overall well-being. This article focuses on the siddha principles of diurnal routine (nithya ozhukam) and seasonal regimens (kaala ozhukam) as a preventive and postponing measure of AD and improving cognition through regular habitual patterns.

### Siddha Strategies for Alzheimer's Prevention and Cognitive Vitality

#### Diurnal Routine (Nithya Ozhukam)

Diurnal routine is the formal term referring to the sequence of activities carried out during the day (from waking in the morning until going to sleep at night). *Nithya Ozhukam*, an ancient siddha daily regimen, is essential for holistic well-being and encourages physical and mental harmony by addressing the mind, soul, sensory organs, digestion, bodily humours (Vatham, Pitham, Kabam) and wastes (Malam). Hence, let us take a view on both the siddha system along with modern views of this timeless wisdom, offering a blueprint for optimal health and prevention of AD and cognition vitality.

#### Some applied basics of *Nithya Ozhukam* are as follows

**1. Waking up early- *Thuyil ezhuthal*-** During sleep, the brain acts like a "janitor", clearing out harmful proteins, such as the accumulation of amyloid- beta and tau, thus preventing plaque and tangle deposition. Establishing a consistent, early wake – up time along with an early – to – bed routine plays a crucial role by regulating melatonin and cortisol, which keeps the biological clock synchronised, which is protective for brain health by supporting the body's natural circadian rhythm<sup>[5]</sup>. This is highlighted by Sage Therayar in his book *Pathartha guna sinthamani* that the Cerebrospinal Fluid (CSF) in the early morning is in the state of glymphatic clearance, containing lower levels of harmful substances. Hence, waking up early after

getting a proper sleep at night is a process essential for preventing neurodegenerative diseases such as AD, and improving memory and cognition.

**2. Urination and Defecation- *Malam neer kazhithal*-** Several research says that proper defecation helps prevent cognitive decline by maintaining gut microbiome, which produces beneficial butyrate that reduces neuroinflammation by modulating immune responses, such as suppressing activation of NF- $\kappa$ B pathway, reducing production of pro- inflammatory cytokines TNF $\alpha$ , IL1 $\beta$  and IL 6, enhancing the antioxidant pathway and protecting neuronal and synaptic activity<sup>[4]</sup>.

**Sage Therayar**, in his book *Pathartha guna sinthamani*, states that proper defecation eliminates the wastes and balances the three humours in the body and maintains overall well-being. In addition, he says that proper intake of spinach, foods rich in fibre, butter, ghee, dry grapes, specific types of bananas (especially peyan pazham), warm milk, and warm water help in the prevention of constipation.

**3. Oral hygiene – *Pal thulakkal* –** Good oral hygiene helps prevent Alzheimer's risk by preventing inflammation and entry of harmful bacteria into the brain. Research says that bacteria associated with gum disease, such as *Porphyromonas gingivalis*, produce toxins called gingipans. This gingipans can cross the BBB and damage nerve cells through the formation of amyloid plaques and neurofibrillary tangles which is the characteristic features of AD. Hence, regular brushing and flossing are essential for minimising gum disease and reducing the number of these harmful bacteria, thereby supporting overall brain health and potentially lowering Alzheimer's risk and improving cognitive vitality<sup>[2]</sup>.

Ancient Siddha literature recommends chewing barks of certain sticks in the morning as well as after a meal to prevent plaque formation since they have anti- bacterial, anti-inflammatory action, etc. Those barks include those of fresh stems of neem (*Azadirachta indica*), liquorice (*Glycyrrhiza glabra*), black catechu (*Acacia catechu*), arjun tree (*Terminalia arjuna*), and Indian privet (*Vitex negundo*). Along with brushing, practising oil pulling using sesame oil or virgin coconut oil, and tongue scraping is very effective against plaque induced gingivitis, periodontitis and limits the extra – neuronal sources of inflammation and delays the beginning of neurodegeneration, thus preventing AD and improving cognition.

**4. Physical exercise – *Udal payirchi/ Abbiyasam*-** Findings from several studies reveal that physical exercise is the strongest protective practice that helps prevent AD by enhancing blood flow to the brain, which helps deliver oxygen and nutrients and clear toxic proteins like A $\beta$  and tau<sup>[11]</sup>. This leads to increased brain volume and better function in critical areas like the hippocampus (an area associated with memory and learning). Further scholarly research studies also prove that physical activity facilitates neurogenesis and strengthens the connection between existing neurons (synapses). It also stimulates the release of Brain- Derived Neurotrophic Factor (BDNF), a protein

that supports neuronal health, growth and synaptic plasticity. This improves the brain's ability to adapt, learn and form new memories, thus enhancing cognition.

Also, several ancient siddhars had stated the importance of practising yogasanas, mudras and certain varma points that nurture the nerves and prevent AD by improving cognitive vitality.

- Various studies suggests that consistent, long term practice of specific Yoga postures such as Pranayamam, Garudasana, Gomukhasana, Shalabhasana, Suryanamaskar, Savasana improve circulation particularly to brain, boosting oxygen; influence brainwave activity promoting state of calm alertness; also leading to structural changes in brain regions like hippocampus and prefrontal cortex; also regulates cortisol and serotonin levels and thus improves concentration, allowing better focus on cognitive tasks and potentially slowing down age- related cognitive decline<sup>[1]</sup>.
- Also practising certain Mudras (hand gestures in yoga) such as Panchamukha mudra, Chin mudra, Purna jnana mudra, Shanmukha mudra, Trimukha mudra, Uttarabodhi mudra, Vajra mudra regulates circulation, oxygenation and nerve conductivity and also acts in specific areas of the brain via sensorimotor cortex and promotes neuroplasticity and enhances memory and concentration, delaying the cognitive decline, thus preventing AD.

Hence, practicing Yoga along with mudras acts as a non-pharmaceutical therapy along with better nutrition for leading a better quality of life.

**5. Bathing- Neeradal-** Maintaining personal hygiene by regular bathing promotes physical health and contributes to mental and emotional well- being. A regular bathing routine helps keep the body clean and provides a relaxing experience, which reduces cortisol and can help lower anxiety.

**Special types of baths, as stated in siddha literatures**, such as

- **Manjal kaapeetu kuliyal** (Haldi bath) - bathing with ground turmeric (*Curcuma longa*) paste helps reduce inflammation and helps in increasing brain levels of serotonin and dopamine, which support neuronal health and mood stability.
- **Panchakarpa kuliyal** ( Five powder bath) - bathing with applying the paste of wild turmeric (*Curcuma aromatic*), pepper corns (*Piper nigrum*), neem seeds (*Azadirachta indica*), skin of myrobalan (*Terminalia chebula*) and amla (*Emblica officinalis*) powders mixed with milk of kaaram pasu (Desi cow with black tongue and nipples) over the head is known for cooling the body and calming the nerve heatness, which reflects on improving the tone of neurons.
- **Ennai muzhukku** (Oil bath) - the procedure in which a gentle massage over the scalp produces a constant pressure and vibration which is transmitted inwards through the fluid medium of cerebrospinal fluid. Thus, oil bath normalises the two important neurotransmitters serotonin (5-HT) and norepinephrine, which regulates wide variety of neuropsychological processes.

Usually recommended oils for an oil bath are coconut oil, cow ghee, sesame oil, and castor oil for healthy individuals.

**6. Dressing- Aadai aabarangal-** Dressing well is not about vanity, it's about dignity. Dressing well is a form of self-respect, communication and empowerment.

Ancient Siddhars state that wearing unclean clothes leads to loss of skin lustre and intelligence.

Also wearing certain fabrics, such as silk, wool, cotton provide varied tactile input which is closely linked to the somatosensory cortex and can strengthen sensory memory pathways. Also, fabrics help maintain a stable body temperature. The brain functions best in thermal comfort; extreme cold and heat hamper *hippocampal activity*, which is crucial for memory formation, thus preventing AD.

In ancient siddha texts, one of the nine gemstones, **SARDONYX** (komedhagam), represents Rahu of the nine planets, who is known as "Lord of Wisdom" (gnanakaragan), and the person who wears it will be highly intellectual.

Also, Gold and Silver are considered "Satvic" metals that calm the nervous system and promote sharper intellect. As per the scientific view, some evidences wearing jewels made of certain stones enhances brain function in direct ways, such as

- *Psychological anchoring* – wearing a special jewel, associates the brain with focus and boosts recall,
- *Electromagnetic and trace mineral effects*- some suggest that gold, silver and copper worn against the skin may influence micro- currents in the body and provide trace amounts of beneficial ions that support brain health.

**7. Food- Unavu-** In the siddha system of medicine, food is considered the first medicine, and proper intake plays a vital role in nurturing memory and cognition. The link between food and mental health is explained through Uyir thathukkal (Vatham, Pitham, Kabam), Udal thathukkal (7 body constituents) and the subtle connection with 96 thathuvams ( principles of body- mind-spirit). It is highlighted by Thiruvalluvar as

**"Maarupaadu ilaadha undi maruthunnin Oorupadu illai uyirku"**

**a. Siddha- Based Dietary guideline to nurture nerves and enhance cognition**

- ✓ *Warm water with honey and lemon-* clears harmful toxins and accumulations
- ✓ *Amla* (*Emblica officinalis*) or *Triphala* (combination of *Emblica officinalis*, *Terminalia chebula*, *Terminalia bellerica*)*tonic-* rejuvenates nerve tissue
- ✓ *Soaked Almonds, black sesame or walnuts-* strengthens majjai
- ✓ *Milk with ghee and turmeric-* calms vatham, nourishes the brain and improves recall
- ✓ *Thinai/ Kambu koozh* (*Millet porridge*)- easy to digest and balance three humors
- ✓ *Vallarai* (*Centella asiatica*) or *Mudakathan* (*Cardispermum helicabum*) *chutney-* enhances memory, focus, and relieves stress

- ✓ *Herbal tea (Brahmi- Bacopa monneiri, tulsi – Ocimum sanctum, mint- Mentha piperita, sankupushpi- Clitoria ternatea)-* calms stress, sharpens concentration
- ✓ *Vegetable poriyal-* provides antioxidants, vitamins, minerals for nerve protection and better cognitive function.
- ✓ *Fruits-* provide antioxidants, flavonoids, vitamins, and minerals that nurture the nerves and enhance cognition.

**8. Drinks- Baanam-** As already mentioned in food, certain drinks such as normal water, herbal drinks such as *Warm water with honey and lemon, Amla, vallarai or Triphala tonic, Herbal infusions, Milk with ghee and turmeric, jeera- coriander water, tender coconut water, spiced buttermilk, warm barley or millet* cruel act as subtle carriers of nourishment, maintain humor balance, clears nerve channels and directly nourishes marrows and nerves, thus enhancing nerves, memory and cognition. Most importantly, adequate water intake supports brain perfusion, cellular homeostasis and clearance of neurotoxin proteins.

**9. Sleep- Urakam/ Nithirai-** Sleep can be defined as a state of active inhibition of the cortical mechanism. Its function is to protect nerve cells by preventing the accumulation of toxins. Sleep occurs due to the activity of sleep-inducing centres in the brain. When circulatory channels are filled with *Kapha Dosha*, and also due to fatigue, *Indriyas* (sense organs) will withdraw from their respective functions. This leads to the manifestation of sleep in individuals. This happens during nighttime, and it is the best time to sleep.

Generally, a 16-hour duration is required for infants and 10 hours for adolescents. For the middle-aged individuals, 8 hour sleep is advised, whereas 5 hours of sleep is advised for the elderly group.

Proper sleep is one of the natural nurturers to nerves and cognition. During deep, slow-wave sleep, the *glymphatic system* – a brain-clearing network – becomes very active and flushes out the accumulation of amyloid and tau proteins and other toxins. Especially REM and deep sleep help the brain consolidate short-term memories into long-term storage. Also, sleep regulates neurotransmitters such as acetylcholine, which is crucial for learning and memory and also help repairs synapses<sup>[19]</sup>. Whereas chronic sleep deprivation raises inflammatory markers, hence damaging brain cells, weakening brain circuits that are involved in cognition.

Certain practices followed in the siddha system of medicine, such as *Nasya, oilbath, and pranayama* enhances the balanced flow of energy, normalise the two important neurotransmitters serotonin (5-HT) and norepinephrine, influence the pineal gland for melatonin production and contribute to comfortable sleep, which prevents AD, and enhances cognition<sup>[18]</sup>.

Along with these daily regimens, following proper regimens at proper seasons (Kaala ozhukkam) plays a crucial role in providing a conceptual framework for promoting optimal health. Each season can influence the predominance of different kutram (humour) – Vatha. There are 6 different seasons (Kaalam) that occur in a year, and 2 months together make a Season (Kaalam).

#### The 6 seasons are:

- a. Kaar Kaalam, mid-July to mid-September
- b. Koothir Kaalam-mid-September to mid-November
- c. Munpani Kaalam - mid November to mid-January
- d. Pinpani Kaalam, mid-January to mid-March
- e. Ilavenir Kaalam- mid March to mid-May
- f. Muthvenir Kaalam - mid-May to mid-July

#### SEASONAL FOOD PRACTICES AS MENTIONED IN SIDDHA TEXTS

Season and characteristics	Kaar kaalam	Koothir kaalam	Munpani kaalam	Pinpani kaalam	Ilavenir kaalam	Muthvenir kaalam
Tastes to be consumed	Sour, salt, sweet	Sweet, bitter, astringent	Sweet, sour, salt	Sweet, sour, salt	Bitter, sour, astringent	Sweet
Quality of food to be taken	Warm, oily	Dry, light	Hot, heavy, moist, oily	Hot, heavy, moist	Light, dry	Cold, liquid form
Foods to be taken	Panchalogam buttermilk, meat, honey	Honey, amla, pulse, sugar, rice varieties	Meat, black urad, wheat, sugarcane, drinks made of rice, jaggery and grapes, corn, pulses, garlic, ginger, sugarcane and milk products	Meat, black urad, wheat, sugarcane, drinks made of rice, jaggery and grapes, corn, pulses, garlic, ginger, sugarcane and milk products	Water infused with vetiver, sandalwood, honey, wheat, mango, rice, old barley, and pulses.	Rice varieties, banana, jackfruit, meat, water infused with pathiri poo and vettiver, fruit juices, stirred curd and milk products

Along with these food practices, following proper practices such as oil bath, exercises, sleeping time, virechanam at the right seasons, balances the trihumours, clearing toxins and production

of free radicals, ensures detoxification and provides proper nerve communication, helps reach the subtle nutrients to the nerves, prevents AD and enhances cognition.

seasonal regimen, rejuvenating herbs, proper sleep, mindful practices and harmonious lifestyles as the pillars for protecting the nervous system. By integrating these age- old strategies, we can enhance udal valimai (bodily strengths), stabilise uiyir thattu (life forces), and preserve arivu (intellect). In the modern context,

these holistic approaches provide a sustainable path to delay neurodegeneration, protect against AD and promote lifelong cognitive vitality. Thus, siddha strategies serve not only as remedies but as preventive, nurturing tools- guiding us toward a sharper mind and a healthier ageing process. Further rigorous scientific validation is needed to integrate these traditional wisdoms into comprehensive approaches for Alzheimer's prevention and fostering cognitive vitality.

## REFERENCES

- Chitra B, Ramaswamy RS. An overview of the role of Siddha practices in the prevention and management of age-related neurodegenerative disorders with special reference to senile dementia. *Indo Am J Pharm Res.* 2018;8:111–117.
- Seyedmoalemi MA, Saeid-Moallemi, Z. Association between periodontitis and Alzheimer's disease: A narrative review. *IBRO Neurosci Rep.* 2025;18:360–365.
- Cohen-Mansfield J, Parpura-Gill A. Bathing: A framework for intervention focusing on psychosocial, architectural and human factors considerations. *Arch Gerontol Geriatr.* 2007;45:121–135.
- Barnard ND, Bush AI, Ceccarelli A, et al. Dietary and lifestyle guidelines for the prevention of Alzheimer's disease. *Neurobiol Ageing.* 2014;35(Suppl 2):S74–S78.
- Pande V, Purohit P, Bahuguna PC, et al. Dincharya demystified: Applying ancient wisdom in daily routines. *Ayushdhara.*
- Chu NS. Effects of betel chewing on the central and autonomic nervous systems. *J Biomed Sci.* 2001;8:229–236.
- Thiagarajan R. *Gunapadam Thaathu-Jeevavagupu.* Chennai: Indian Medicine and Homoeopathy; 2009.
- Prakash KA, Nagmota DS, Borkar MS, et al. Integrating AYUSH therapies for the management of neurodegenerative disorders. *JNR.* 2025:995–1021.
- Duraiarajan K. *Noiillaneri (Siddha Hygiene and Preventive Medicine).* Chennai: Indian Medicine and Homoeopathy; 1993.
- Pathartha Gunasinthamani.* Chennai: Indian Medicine and Homoeopathy; 2007.
- De La Rosa A, Olaso-Gonzalez G, Arc-Chagnaud C, et al. Physical exercise in the prevention and treatment of Alzheimer's disease. *J Sport Health Sci.* 2020;9:394–404.
- Kulkarni MS, Miller BC, Mahani M, et al. Poor oral health is linked with a higher risk of Alzheimer's disease. *Brain Sci.* 2023;13:1555.
- Chandrani S, Thenmozhi AJ. Potential therapeutics from Ayurveda, Siddha, and homoeopathic medical systems for Alzheimer's disease. In: Thenmozhi AJ, Manivasagam T, editors. *Nutraceuticals for Alzheimer's Disease.* Singapore: Springer Nature; 2023. p. 171–195.
- Jayareka KS, Sathiyabhamma B, Sobiya P, et al. Prevention of Alzheimer's disease by predicting oral issues using Grey Wolf Optimisation. In: *Proc Int Conf Multi-Agent Systems for Collaborative Intelligence (ICMSCI);* 2025; Erode, India. IEEE; p. 1171–1176.
- Chen WW, Zhang X, Huang WJ. Role of physical exercise in Alzheimer's disease. *Biomed Rep.* 2016;4:403–407.
- Gangadharan T, Arumugam M. Siddha medicine and modern neuroscience: A synergistic approach to neurological care. *3 Biotech.* 2025;15:96.
- Kavitha S, Magudapathi S, Suguna M, et al. Significance of oil bath in Siddha system: A review. *Int J Adv Multidiscip Res.* 10.
- JR, GA, VL, et al. Significance of Siddha traditional oil bath (Ennaimuzhukku): A review. *Drug Comb Ther.* 2022;4:12.
- Gaur A, Kaliappan A, Balan Y, et al. Sleep and Alzheimer's: The link. *Maedica.* 2022;17. doi:10.26574/maedica.2022.17.1.177.
- Giridharan S, Kumar NV, Bhana R. The impact of Kundalini Yoga on cognitive function and memory: A systematic review of randomised controlled trials. *Cureus.* 2024. doi:10.7759/cureus.63161.
- Oh KT, Ko J, Shin J, et al. Using wake-up tasks for morning behaviour change: Development and usability study. *JMIR Form Res.* 2022;6:e39497.

### Creative Commons (CC) License

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) license. This license permits sharing and redistribution of the article in any medium or format for non-commercial purposes only, provided that appropriate credit is given to the original author(s) and source. No modifications, adaptations, or derivative works are permitted under this license.

### About the corresponding author



**Dr. K. Thangagomathi** is a postgraduate scholar pursuing MD (S) in the Department of Noi Naadal at Government Siddha Medical College, Palayamkottai, Tirunelveli, Tamil Nadu, India. Her academic interests focus on Siddha diagnostics, preventive medicine, and integrative approaches to healthcare within traditional medical systems.