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YOGA FOR ALZHEIMER PATIENTS

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Alzheimer's disease is a progressive form of dementia that causes brain cells to degenerate and waste away, resulting in problems with memory, thinking, language, and behavior.Alzheimer's disease is a brain disorder that slowly destroys memory and thinking skills and eventually the ability to carry out the simplest task. In most people with the disease those with the late –onset type symptoms first appear in this mid -60's and it's very rare. Alzheimer's disease is the most common cause of dementia among older adults. There is no cure for Alzheimer's and its devastating effects. But incorporating a complementary approach, such as yoga, into Alzheimer's care, may help with some of the symptoms and challenges of the disease. Modern yoga incorporates poses, breathing exercises, and meditation. It's often described as a mind-body intervention (MBI), meaning it focuses on the relationship between the brain, mind, body, and behavior and their effect on health and disease. According to the National Center for Complementary and Integrative Health (NCCIH), research suggests that yoga may reduce stress, support good health habits, and improve mental-emotional health, sleep, and balance. Most yoga for Alzheimer patients involves gentle movements performed in a slow, easy manner. Classes tend to be shorter than a typical yoga session, generally lasting anywhere from 10 to 30 minutes. Sequences can be tailored to an individual's physical capabilities and motor skills. Instructors never force movements and participants are encouraged to do what they can. This can help an individual with Alzheimer's feel a sense of self-determination and empowerment. For those with moderate or severe dementia, or those who may have issues with balance or are unable to sit on the floor or mat, chair yoga may be a good option. In chair yoga, you either do the poses from a seated position or stand using the chair as support. Basic yoga poses, such as Mountain pose, Prayer pose, or any of the various Warrior poses, is adapted so that you can do them from a seated position for chair yoga. Seated or standing, you can still benefit from improved posture, increased flexibility of the hips and strengthening of legs, ankles, and feet. Yoga classes designed for individuals with Alzheimer's often emphasize the mindfulness teachings of yoga in addition to the physical movements.

Keywords: Alzheimer, progressive, brain disorder, motor skills, mind-body intervention, self-determination and empowerment

INTRODUCTION-

Alzheimer's disease is a neurological condition in which the death of brain cells causes memory loss and cognitive decline. It is the most common type of dementia accounting for around 60-80%of cases of dementia.Alzheimer's disease affects around 5 million people. This condition usually affects people aged 65 year and over. With only 10% of cases occurring in people younger than this.Alzheimer's disease is a condition that affects the brain. The symptoms are mild at first and become more severe over time. It's named after Dr.Alois Alzheimer who first described the condition in 1906.Common Symptoms of Alzheimer's disease includes memory

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loss, language problems and impulsive or unpredictable behaviour. One of the main features of the condition is the presence of plagues and tangles in the brain.Alzheimer's disease is a progressive form of dementia that causes brain cells to degenerate and waste away, resulting in problem with memory, thinking, language and behaviour.

CAUSES OF ALZHEIMER'S DISEASE

The exact cause of Alzheimer's disease is not known yet but is said to be caused by a combination of various factors such as environment, lifestyle, and genetics. Alzheimer's is caused by the death of brain cells due to problems with brain proteins that disrupt the functioning of brain cells. Neurons in the brain get damaged and lose connection with each other. Genetics is one cause that has been identified by a number of medical experts throughout the world.

RISK FACTORS OF ALZHEIMER'S DISEASE

1. Aging- people above 60 years of age are more prone to the risk of getting Alzheimer's disease.
2. Family History- Having a family member with Alzheimer's disease increases the risk of it for a person.
3. Certain genes- some genes are associated with Alzheimer's disease and about 1 % of the total cases are caused by these genes.
4. Down Syndrome- people with Down syndrome develop Alzheimer's disease as the ability of the brain to function properly gets severely damaged.
5. Sex- women are more likely to develop the disease than men.
6. Mild cognitive impairment is also been associated with Alzheimer's disease.
7. Past head trauma-severe head injuries or repeated head injuries at various parts of the brain increases the risk of the disease.
8. Poor sleep patterns increase the risk as it doesn't give the brain proper rest to perform the required function.
9. Lifestyle and heart health- a sedentary lifestyle and poor heart health increase the risk of Alzheimer's disease.
10. Exposure to harmful metals, pesticides, and industrial chemicals increases the risk of Alzheimer's disease.

There is no cure for Alzheimer and it devastating effects. But incorporating a complementary approach such as yoga into Alzheimer's care may help with some of the symptoms and challenges of the disease. Research around yoga and its impact on Alzheimer's disease is somewhat limited and far from non-conclusive. There is anecdotal evidence to suggest that yoga has potential benefit that could help in reducing stress, calming agitation and improving overall mood. Yoga can provide a safe social physical activity that may help alleviate the isolation that Alzheimer patient can often feel. Yoga is safe, it can reduce stress level and it's good for mental health. While we don't know the direct effect it may have on cognitive impairment. Yoga offers significant benefits including being good for your balance so we do suggest it to patients.

Modern yoga incorporates poses breathing exercise and meditation. It's often described as a mind body intervention meaning it focuses on the relationship between the brain, mind, body and behaviour and their effect on health and diseases. According to NCCIH research suggest that yoga may reduce stress, support good health habits and improve mental-emotional health, sleep and balance. The NCHS notes that yoga is the most common complementary health approach used by adults in the United States among older adults yoga has grown in The popularity with 6.7 %of U.S.adults aged 65 and over practising yoga in 2017 compared with 33 percent in 2012 according to the centre for disease CDC and NCHS.For individual living with

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Alzheimer's or other form of dementia yoga is a relatively safe form of movement with low risk for injury.

YOGA TO BOOST COGNITIVE THINKING – For years researchers have known that exercise is one of the most important factors in reducing your risk for Alzheimer's. A 2011 review in Mayo clinic proceding found that midlife exercise significantly reduced the risk of dementia in all adults and that people with mild cognitive impairment of dementia scored better on tests of cognition after 6-12 month of exercise than that sedentary peer.

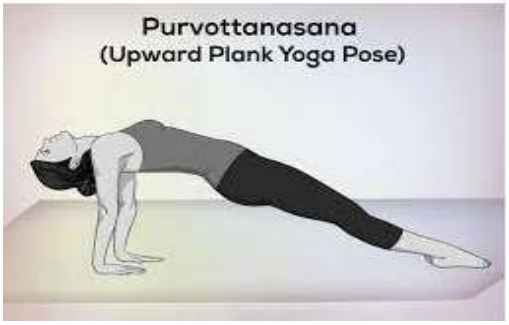
HOW DOES YOGA LOWER STRESS- The potential risks are low, but what about the possible benefits of yoga for those with Alzheimers.The jury is still out on whether practising yoga can actually delay or slow or the progression of Alzheimer's disease. But yoga does help with stress, which is known to have detrimental effects on the body. Stress can have detrimental effects on the body. Stress can have a harmful effect on the progression of neurodegenerative disease like Alzheimer's stress activate the body's fight or flight responses. This triggers a rise in heart rate, blood pressure and the release of stress hormones, all of which have negative effects on your cardiovascular systems. Yoga helps activate the opposite effect known as the rest and digest response when our parasympathetic nervous system essentially acts as a brake, dampening the stress response triggered by the cascade of stress hormone. Over time regular yoga practice fosters the growth of this relaxation response enabling you to be less reactive to stress.

CAN YOGA IMPROVE BRAIN FUNCTION-Physical activity is not only important for overall wellness but it's associated with a lower risk of cognitive decline in cognitive function that occur in individual who are at risk of or who have Alzheimer's disease. While it is not fully understood how exercise lowers dementia risk, scientists believe that exercise leads to better vascular health and thus better brain health. It's thought that exercise directly benefits brain cells by increasing blood and oxygen flow in the brain. While most yoga particularly the gentle forms geared toward people with Alzheimer's. It's not intense enough to be considered an aerobic exercise; there is some evidence that it may still offer similar cognitive benefits.

THERAPEUTIC IYENGAR YOGA FOR ALZHEIMER'S DISEASE

Some common asanas or yoga for Alzheimer's disease which can be performed by Alzheimer patients are:

- **Purvottanasana**: This yoga for Alzheimer's disease increases the oxygen level and improves the breathing process.



- **SuptaBaddaKonasana**: This asana provide oxygen to the brain and strengthen the nerve along with improving the breathing.

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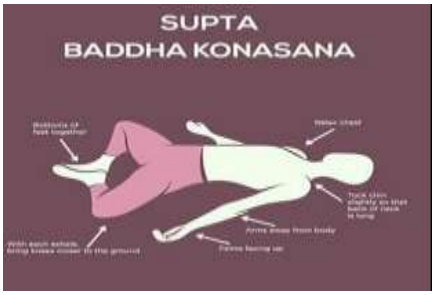

- **SuptaSukhasana**: This yoga for Alzheimer's disease also improves the quality and quantity of oxygen in the body.

- **Uttanasana:** This asana circulates the blood properly and provide the mind required **a**mount of blood that in turn helps in memory improvement.

- **AdhoMukhaSvanasana:** This yoga for Alzheimer's disease improves blood circulation in the intelligence centre (Brain) and hence improves memory and has the chance of lost memory retain.

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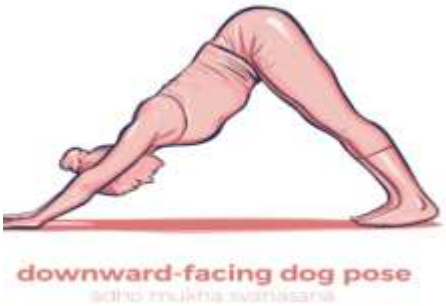

- **Sirsasana:** This is an asana that works against gravitational force and activate dopamine hormone which due to in quantity. This asana makes the dopamine stronger and helps the brain to release in the right quantity

- **Sarvangasana:** This asana balance the hormones and emotions in mind which helps to perform daily task.

- **SetubandhaSarvangasana:** This asana is very effective to balance hormones imbalance and emotional imbalance. As Alzheimer's patient forgets the moments. This yoga for Alzheimer's patient forgets the moments. This yoga for Alzheimer's disease helps to remember things by controlling hormones.

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- **Ujjayi Pranayama:** This pranayama increases the oxygen level in the brain and body and improve blood circulation in the body. This also strengthens the memory.

OUTCOMES

A recent study review, published in December 2018 in the*International* Journal of Environmental Research and Public Health, concluded that mind-body exercise (such as yoga and tai chi) may be a safe and effective intervention for enhancing cognitive function among people aged 60 years or older. Four of the studies included in the meta-analysis specifically involved yoga interventions. One included study, published in January 2017 in the *JournalAlternative and complementaryMedicine*, found that yoga practice that involves postures, breathing, and meditative exercises leads to improved attention and information processing (time required to perform a task) abilities. However, the study authors point out that further research is needed to make a more conclusive statement.

Another , found evidence that yoga enhances many of the same brain structures and functions that benefit from aerobic exercise. Researchers reviewed 11 studies and found that yoga appears to have a positive effect on key areas of the brain responsible for memory and information processing, as well as emotional regulation. For example, practicing yoga appears to increase the volume of the hippocampus, a part of the brain known to shrink with age. The hippocampus is also the structure that is first affected in dementia and Alzheimer's disease. The study authors suspect that enhancing emotional regulation and reducing stress is a key to yoga's positive effects on the brain.

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