

Brain Health in the Workplace

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What is Brain Health?

A Healthy Brain provides cognition, judgment, memory, relationships, productivity, and is one of the two main resources for your life.

Loss of Brain Health may be temporary, permanent or progressive:

- Temporary may be from conditions like excessive stress, nutritional imbalance, depression, grieving, medical treatments, drug interactions, etc.
- Permanent may be from head injury from concussions (TBI), stroke, drug/alcohol abuse
- Progressive may be from diseases like dementia, Parkinson's, Alzheimer's disease, and others



How Does Lack of Brain Health Impact the Workplace? In at least 4 interrelated ways:

1. Productivity – Inattention or “brain fog” on a day to day basis
2. Absenteeism
3. Environmentally - Increased stress carried into workplace
4. Economically - Turnover, early retirement (loss of information and expertise to workplace)



Who Is Impacted by Alzheimer's Disease (AD)?:



Answer: EVERYONE!



Boomers' #1 Goal

Maintain a sharp brain with age

Boomers' #1 Fear

Getting Alzheimer's



The Devastating Statistics of AD:

- AD on the rise.
5.7 million
Americans of all
ages have AD
- 5.5 million are
age 65 or older,
200,000
younger onset
- Sixth leading
cause of death
- Women make up
two thirds of AD
patients

In the US:

Currently, one new
case of AD is
diagnosed
every 65 seconds.



- Hispanics 1 ½
times more likely to
develop AD than
Caucasians
- 1 in 3 caregivers is
65 or older
- 6 in 10 AD
caregivers were
employed in the
past year while
providing help.
They worked an
average of 35 hours
per week while
caregiving.



In Arizona



Number of Arizonans Age 65+ with AD

2017 = 130,000

2025 = 200,000

* A projected increase of 53.8%

Alzheimer's is the 4th leading cause of death in AZ

AD Caregivers = 325,000

Hours of Unpaid Care = 370M

Value of Unpaid Care (in millions of dollars) = \$4,685B

Higher Health Care Costs for Caregivers = \$176M

of cases expected to grow by 66.7% by 2025

SOURCE: Alzheimer's Association. 2017 Alzheimer's Disease Facts and Figures. *Alzheimers Dement* 2017;13:325-373.

SOURCE: 2015 ARIZONA ALZHEIMER'S STATE PLAN: A FRAMEWORK FOR ACTION Working Together to Address the Growing Human and Financial Cost of Dementia in Arizona (September 2015)



AZ Alzheimer's State Plan: A Framework for Action

Working Together to Address the Growing Human and Financial Cost of Dementia in Arizona (September 2015)

Recommendations:

Community based services and public funding and resources for home and community based services.



Alzheimer's Research and Prevention Foundation (ARPF):

Founded in 1993 by Dharma Singh Khalsa, MD and Kirti Khalsa in Phoenix, AZ

Mission: Dedicated to the Prevention of Alzheimer's Disease by funding neuroscience research on lifestyle methods, and providing educational outreach and memory screenings.



ARPF: Designing and funding groundbreaking work for 25 years

- Dedicating research to the *prevention* of Alzheimer's through The 4 Pillars of Alzheimer's Prevention, including yoga/meditation and lifestyle
- Revolutionizing the conventional medical wisdom
- Establishing Alzheimer's disease (AD) as a preventable disease that can even be effectively treated and often prevented via a brain-healthy lifestyle
- Educating the public about the disease and ways to delay its development/reduce risk factors.



Research Partners



The ARPF Four Pillars of Alzheimer's Prevention™

1. Diet and Brain Specific Nutrients
2. Stress Management
3. Mental & Physical Exercise
4. Spiritual Fitness
(Psychological & Spiritual Wellbeing)



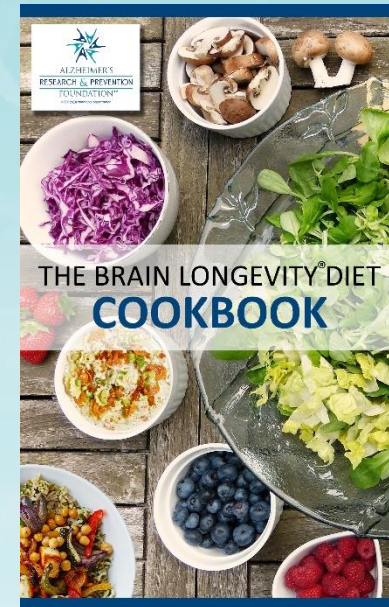
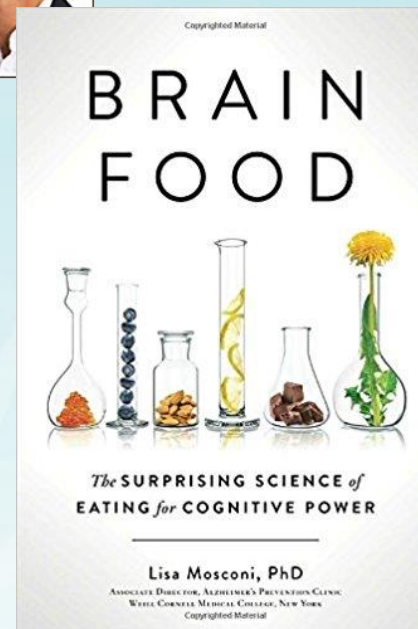
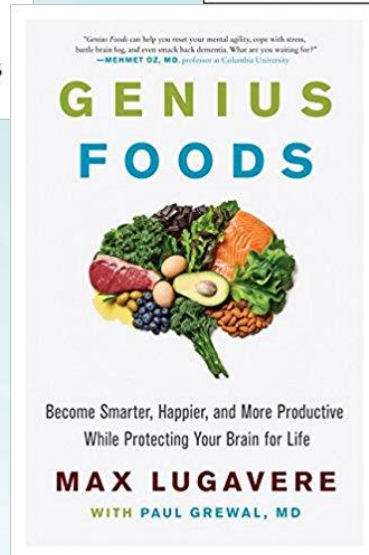
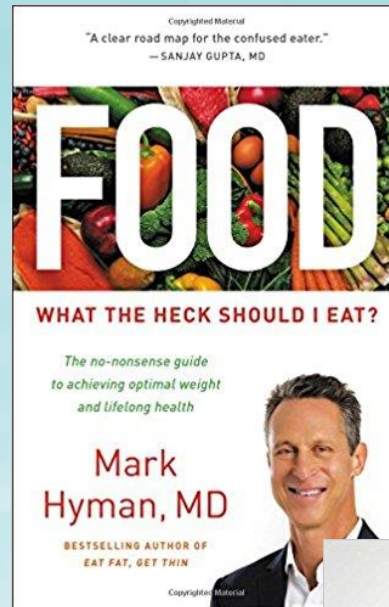
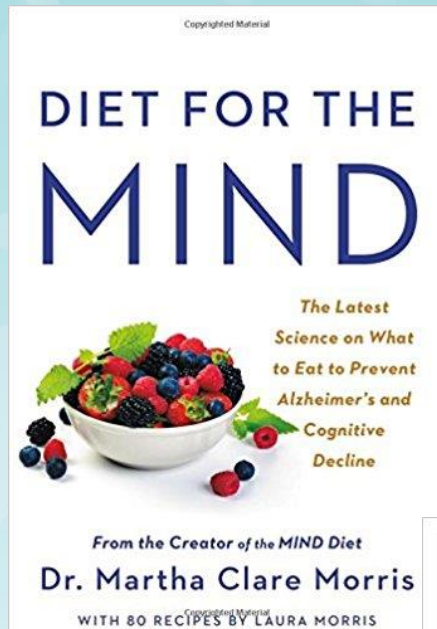
Pillar 1: Diet

Mediterranean-type

- 5 to 20% Good Fats
- 40% lean protein (favor low fat meats)
- 40% complex carbohydrates
- Brain Foods
(blueberries, green leafy vegetables, Omega-3)
- Limit sugar, dairy
- Memory Specific Nutrients



BRAIN FOOD BOOKS published in the last 4 months



Pillar 2: Stress Management with Yoga/Meditation and Cognitive Function

Prolonged Exposure to Stress Leads to Loss of
Brain Cells in the Memory Center (1985)

Bruce S. McEwen, PhD & Robert M. Sapolsky,
PhD

The Rockefeller University, New York, NY
Stanford University, Stanford, CA



Daily Relaxation Response Breaks in a Working Population

**Effects on Self-reported Measures of Health,
Performance and Well-being**

Ruanne K. Peters, SD, Herbert Benson, MD and Douglas
Porter, EDD



Yoga in Parliament?

Ground Breaking News

The UK is becoming a leader in the integration of yoga into society. The recent formation of the **All Party Parliamentary Group on Yoga in Society** is key evidence of this growing momentum. The goal of this group will be to work with politicians to bring yoga into various sectors of society for the greater good of all by providing a platform for the yoga community, the health community, the educational community, the criminal justice community, the business community, and the government to join together to make yoga available to everyone **and speaks to the diverse needs present in the UK.**



Pillar 3: Physical Exercise

Reduces Alzheimer's risk by 50%

Why?

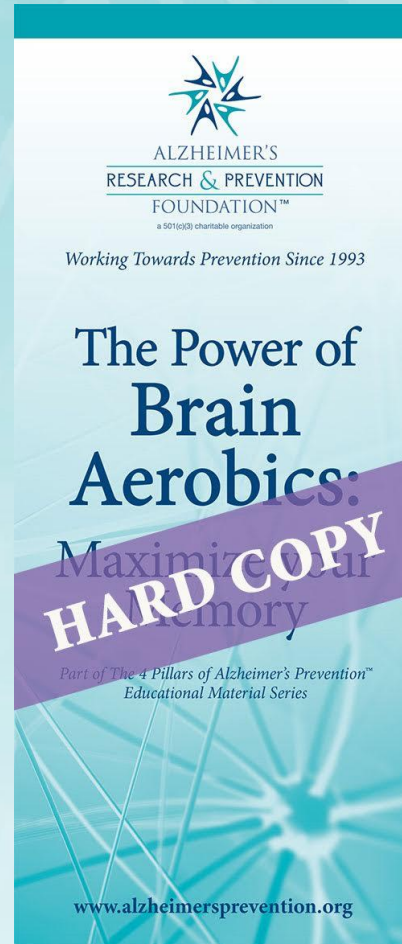
The Brain is Flesh and Blood Like the Rest of the Body

What Works for the Heart works for the Head and Brain



Brain Aerobics Prevent Memory Loss

by **70%**



Pillar 4: Spiritual Fitness (Psychological Well Being)

The Newest Aspect Of Meditation Research

1. Acceptance
2. Independence
3. Mastery
4. Personal Growth
5. Positive Relationships



Reduction
of Risk
Factors

6. Purpose/ Mission ↓ Mild Cognitive Impairment and
Alzheimer's Risk



Caregivers/Care Partners Roles

- Many AD patients require daily assistance
- Care Partners play a vital role in helping AD Patients
- Physical demands
- Prolonged emotional stress
- They are less likely to practice preventive healthcare behaviors and proper self-care



Negative Impacts on Caregivers/Care Partners

- Health of families
- Increase risk factors for mental illness
- Increase risk factors for chronic disease
- Increase their own risk of AD
- Earlier mortality
- Even greater health risks for those juggling with jobs and raising a family



Supporting Caregivers/Care Partners in the Workplace

- Stress Reduction
- Improved sleep
- Getting Proper Exercise and Nutrition
- Getting Social Contact



Supporting Caregivers/Care Partners in the Workplace

- Flex-time
- Telecommuting
- Paid sick leave
- Resources available for Caregivers

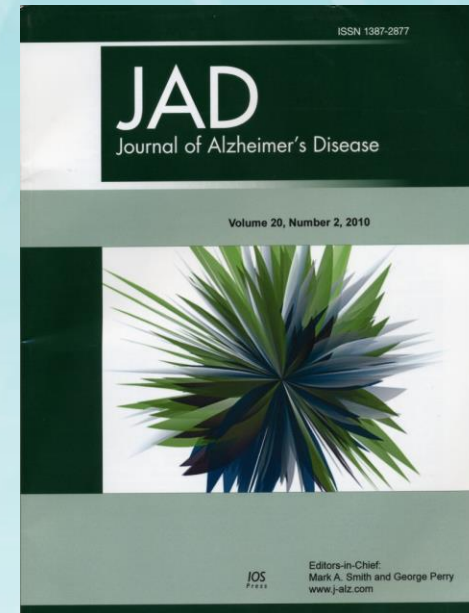
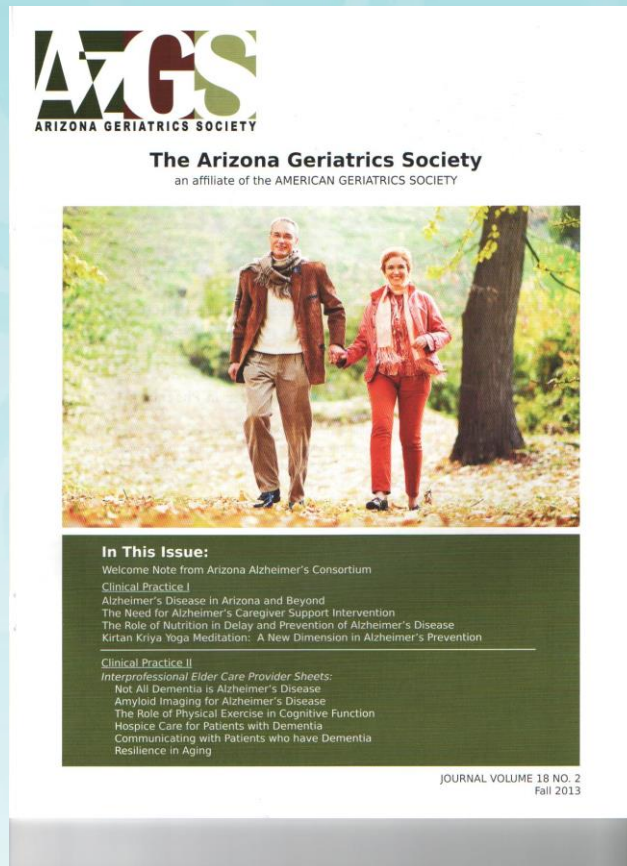


Resources for Caregivers/Care Partners

- Employee Assistance Programs
- Foundation for Senior Living: <https://www.fsl.org/fsls-empowering-family-caregivers/>
- Local Area Agencies on Aging in Arizona: <https://des.az.gov/services/aging-and-adult/aging-and-disability-services/area-agency-aging>
- Alzheimer Speaks: <http://www.AlzheimersSpeaks.com>
- Leeza Gibbons initiative: <http://www.leezascareconnection.org>
- Maria Shriver's The Women's Alzheimer's Movement: <http://www.thewomensalzheimersmovement.org>
- Alzheimer's Association Support Groups: <http://www.alz.org>
- Senior Companion program: <http://www.nationalservice.gov/programs/senior-corps/senior-corps-programs/senior-companions>



Research History: 30 Papers Published in Prestigious Medical Journals since 2010



THE LANCET



Research

In 2017, ARPF research was published three times in prestigious medical journals

IOS
Press

JOURNAL OF ALZHEIMER'S DISEASE

www.iospress.com

J Alzheimers Dis. 2017; 59(4): 1459–1470.

PMCID: PMC5611796

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Baseline Telomere Length and Effects of a Multidomain Lifestyle Intervention on Cognition: The FINGER Randomized Controlled Trial

Shireen Sindi,^{a,b,c,*} Tiia Ngandu,^{b,d} Iiris Hovatta,^e Ingemar Kåreholt,^{a,f} Riitta Antikainen,^{g,h,i} Tuomo Hänninen,^j Esko Levälähti,^d Tiina Laatikainen,^{d,k,l} Jaana Lindström,^d Teemu Paajanen,^m Markku Peltonen,^d Dharma Singh Khalsa,ⁿ

IOS Press

J Alzheimers Dis. 2017;56(3):899-916. doi: [10.3233/JAD-160867](https://doi.org/10.3233/JAD-160867).

Meditation and Music Improve Memory and Cognitive Function in Adults with Subjective Cognitive Decline: A Pilot Randomized Controlled Trial.

Innes KE^{1,2}, Selve TK^{1,2}, Khalsa DS^{3,4}, Kandati S¹.

International Psychogeriatrics

Title: A Randomized Controlled Trial of Kundalini Yoga in Mild Cognitive Impairment. Published January 2017

Harris A. Eyre, Prabha Siddarth, Bianca Acevedo, Kathleen Van Dyk, Pattharee Paholpak, Linda Ercoli, Natalie St. Cyr, Hongyu Yang, Dharma S. Khalsa and Helen Lavretsky. *International Psychogeriatrics*



Brain Longevity[®] Therapy Training



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YOU CAN HELP AGING BOOMERS
MAINTAIN OPTIMAL BRAIN HEALTH

www.alzheimersprevention.org/training

Due to the aging of our population, there is a great need for evidence-based, lifestyle tools that help older adults stay mentally healthy and sharp, and remain active members of our community. Thus the creation of the **Brain Longevity[®] Therapy Training**.



Free Resources: www.alzheimersprevention.org



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Mild Cognitive Impairment (MCI) & Early Alzheimer's Disease:

Symptoms, Diagnosis, and Treatment

DOWNLOAD

Part of The 4 Pillars of Alzheimer's Prevention™ Educational Material Series

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The Power of Brain Aerobics:

Maximize Your Memory

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Working Towards Prevention Since 1993

The 4 Pillars of Alzheimer's Prevention™

- 1 Diet and Supplements
- 2 Stress Management with Yoga and Meditation
- 3 Physical and Mental Exercise
- 4 Spiritual Fitness™

Part of The 4 Pillars of Alzheimer's Prevention™ Educational Material Series



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