



## Memory & Cognition in Later Life

Last reviewed January 2020

### **Complex Antioxidants in a Randomized Single-Blinded Study of Memory in Seniors**

<https://link.springer.com/article/10.1007%2Fs40520-017-0788-6>

This article discusses the findings of a study which examined the effects of a complex antioxidant blend supplement on declarative and working memory over a six month period. (PAID ACCESS)

### **Exploratory Analysis of Covariation of Microbiota – Derived Vitamin K and Cognition in Older Adults**

<https://academic.oup.com/ajcn/article/110/6/1404/5569648>

This study aimed to investigate the relationship between genes involved in gut-microbiota derived menaquinone (MK), concentrations of MK isoforms and cognitive function. (OPEN ACCESS)

### **Vitamin K Antagonists and Cognitive Impairment: Results from a Cross-Sectional Pilot Study Among Geriatric Patients**

<https://academic.oup.com/biomedgerontology/article/70/1/97/2947656>

The objective of this study was determine whether using vitamin K antagonists (VKAs) was associated with cognitive impairment among geriatric patients. (OPEN ACCESS)

### **Vitamin K Antagonists and Cognitive Decline in Older Adults: A 24-Month Follow-Up**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6024671/>

This study sought to determine whether using vitamin K antagonists (VKAs) which interfere with the vitamin K cycle, were cross-sectionally associated with altered cognitive performance and independent predictors of cognitive changes in older adults over 24 months. (OPEN ACCESS)

### **Effect of Probiotic Supplementation on Cognitive Function and Metabolic Status in Alzheimer’s Disease: A Randomized, Double-Blind and Controlled Trial**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5105117/>

This randomized, double-blind, and controlled clinical trial was conducted among 60 AD patients to assess the effects of probiotic supplementation on cognitive function and metabolic status. (OPEN ACCESS)

### **Brain-Gut-Microbiota Axis in Alzheimer’s Disease**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6326209/>

The review presents recent data on the role of brain-gut-microbiota axis dysregulation in the pathogenesis of AD based on the results from animal studies and available clinical observations. Potential therapeutic implications of the gut microbiota modulation in AD are also briefly discussed. (OPEN ACCESS)

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### **Cognitive Effects of Intentional Weight Loss in Elderly Obese Individuals with Mild Cognitive Impairment** <https://academic.oup.com/jcem/article/101/3/1104/2804876>

The objective of this prospective controlled trial was to evaluate the cognitive effect of intentional weight loss in obese elderly patients with mild cognitive impairment, considering the influence of age, apolipoprotein E (APOE) genotype, physical activity, biochemical markers and diet. (OPEN ACCESS)

### **Neuroprotective Pathways: Lifestyle Activity, Brain Pathology and Cognition in Cognitively Normal Older Adults** <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4019766/>

This study used path analysis to examine effects of cognitive activity and physical activity on cognitive functioning in older adults, through pathways involving beta-amyloid (A $\beta$ ) burden, cerebrovascular lesions, and neural injury within brain regions affected in Alzheimer's disease (AD). (OPEN ACCESS)

### **Greater Cortical Thickness in Elderly Female Yoga Practitioners – A Cross-Sectional Study** <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5476728/>

The aim of this cross-sectional study was to compare brain cortical thickness (CT) in elderly yoga practitioners and a group of age-matched healthy non-practitioners. (OPEN ACCESS)

### **Changes in Neural Connectivity and Memory Following a Yoga Intervention for Older Adults: A Pilot Study** <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4927889/>

This study explored the relationship between performance on memory tests and resting-state functional connectivity before and after a yoga intervention versus active control for subjects with mild cognitive impairment (MCI). (OPEN ACCESS)

### **The Effects of an 8-Week Hatha Yoga Intervention on Executive Function in Older Adults** <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4202261/>

The purpose of this RCT was to examine the effects of an 8 week Hatha yoga intervention on executive function measures of task switching and working memory capacity. (OPEN ACCESS)

### **Randomized Clinical Trial of Yoga-Based Intervention in Residents from Elderly Homes: Effects on Cognitive Function** <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3768212/>

The authors examined the benefits of yoga-based interventions compared with waitlist control group on cognitive function. (OPEN ACCESS)

### **A Randomized Controlled Trial of two Simple Mind-Body Programs, Kirtan Kriya Meditation and Music Listening, for Adults with Subjective Cognitive Decline: Feasibility and Acceptability**

<https://www.sciencedirect.com/science/article/abs/pii/S0965229916300279?via%3Dihub>

This article discusses a RCT which assessed the feasibility and acceptability of two simple home-based relaxation programs in adults experiencing subjective cognitive decline, a strong predictor of Alzheimer's disease. (PAID ACCESS)

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### The Potential Effects of Meditation on Age-Related Cognitive Decline: A Systematic Review <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4024457/>

In this paper, the authors review studies investigating the effects of meditation on age-related cognitive decline. (OPEN ACCESS)

### Can Physical Exercise in Old Age Improve Memory and Hippocampal Function? <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4766381/>

The authors outline how research on exercise on cognition can benefit from insights into the functional anatomical and cognitive organization of hippocampal circuits. (OPEN ACCESS)

### Long-Term Moderate Exercise Rescues Age-Related Decline in Hippocampal Neuronal Complexity and Memory <https://www.karger.com/Article/Abstract/488589>

The authors investigated the effects of exercise on the hippocampal neuroplasticity and memory functions during aging. (PAID ACCESS)

### Exergaming and Older Adult Cognition: A Cluster Randomized Clinical Trial <https://www.sciencedirect.com/science/article/abs/pii/S0749379711008622?via%3Dihub>

The purpose of the multi-site cluster RCT was to test whether cyber-cycling enhances executive function and clinical status more than traditional exercise, if exercise effort explains improvement and increase brain-derived neurotrophic growth factor in older adults. (PAID ACCESS)

### The Mental Activity and eXercise (MAX) Trial: A Randomized, Controlled Trial to Enhance Cognitive Function in Older Adults <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5921904/>

This article describes a RCT examining the combined effects of physical plus mental activity on cognitive function in community-dwelling older adults with cognitive complaints. (OPEN ACCESS)

### Video Game Training Enhances Cognition of Older Adults: A Meta-Analytic Study <https://psycnet.apa.org/doi/10.1037/a0037507>

The aim of this meta-analysis was to examine the hypothesis that training healthy older adults with video games enhances their cognitive function. (PAID ACCESS)

### Estrogens, Aging, and Working Memory <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6182645/>

This review surveyed the evidence available supporting the idea that the functioning of the working memory system in women is modulated by circulating estrogens. (OPEN ACCESS)

### Estrogen-Cholinergic Interactions: Implications for Cognitive Aging <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4573353/>

This paper reviewed human studies that have extended preclinical research examining estrogen-cholinergic interactions to humans and discusses the implications of those studies for the underlying hypotheses of cholinergic-estrogen interactions and cognitive ageing. (OPEN ACCESS)

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### Epigenetic Regulation of Estrogen-Dependent Memory

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4174980/>

This review discusses the epigenetic alterations shown thus far to regulate hippocampal memory, briefly reviews the effects of E2 on hippocampal function, and describes in detail the authors work on epigenetic regulation of estrogenic memory enhancement. **(OPEN ACCESS)**

### Postmenopausal Hormone Therapy and Cognition

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4573348/>

This review focuses on hormone effects on cognition and risk for dementia in naturally menopausal women as well as surgically induced menopause, and highlights findings from the large-scale WHI Memory Study (WHIMS) which, contrary to expectation, showed increased dementia risk and poorer cognitive outcomes in older postmenopausal women randomized to HT versus placebo. **(OPEN ACCESS)**

### Hypothyroidism and Risk of Mild Cognitive Impairment in Elderly Persons

<https://jamanetwork.com/journals/jamaneurology/fullarticle/1791529>

This article discusses a cross-sectional, population-based study conducted with randomly selected participants between the ages of 70 to 89 years old to evaluate the association between clinical and subclinical hypothyroidism with MCI. **(OPEN ACCESS)**

### Subclinical Hypothyroidism and Cognitive Function in People Over 60 Years: A Systematic Review and Meta-Analysis

<https://www.frontiersin.org/articles/10.3389/fnagi.2015.00150/full>

This systematic review and meta-analysis was performed to assess available evidence on the association of subclinical hypothyroidism with cognition in community dwelling, relatively healthy older adults. **(OPEN ACCESS)**

### The Effect of Perceived Forgetfulness on Quality of Life in Older Adults; A Qualitative Review

<https://onlinelibrary.wiley.com/doi/abs/10.1002/gps.1686>

The objective of this review was to get an overview of previous research on the relation between perceived forgetfulness (in the absence of objective memory deficit) and quality of life in older adults. **(PAID ACCESS)**

### Effects of Multiple Training Modalities in the Elderly with Subjective Memory Complaints: A Pilot Study

<https://insights.ovid.com/crossref?an=00005792-201907190-00057>

This study investigated the effects of multiple training modalities on senior fitness and neuropsychiatric function in the elderly with subjective memory complaints. **(OPEN ACCESS)**

### Interactions Between Subjective Memory Complaint and Objective Cognitive Deficit on Memory Performances

<https://bmccgeriatr.biomedcentral.com/articles/10.1186/s12877-019-1322-9>

The aim of this study was to examine the interaction between subjective memory cognition and objective cognition on cognitive functions in participants from older generations. **(OPEN ACCESS)**

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### Memory Complaints as a Precursor of Memory Impairment in Older People: A Longitudinal Analysis over 7-8 Years <https://doi.org/10.1017/S0033291701003245>

This longitudinal study was carried out with a community sample of people aged 70 years and older to test three hypotheses related to the relationship between memory complaints, performance and negative affect. (PAID ACCESS)

### Subjective Memory Complaints are Associated with Incidence Dementia in Cognitively Intact Older People, but not in Those with Cognitive Impairment: A 24-Month Prospective Cohort Study

<https://www.sciencedirect.com/science/article/abs/pii/S1064748116303372?via%3Dihub>

The aim of this study was to investigate whether the effect of subjective memory complaints on the incidence of dementia in older people differed based on cognitive function. (PAID ACCESS)

### Education and Cognitive Reserve in Old Age <https://n.neurology.org/content/92/10/e1041.long>

The aim of this article was to assess the contribution of education to cognitive reserve. (PAID ACCESS)

### Social Isolation, Cognitive Reserve, and Cognition in Healthy Older People

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6097646/>

The authors sought to investigate the relationship between social isolation and cognition in later life, and to consider the role of cognitive reserve in this relationship. (OPEN ACCESS)

### Postoperative Cognitive Dysfunction and its Relationship to Cognitive Reserve in Elderly Total Joint Replacement Patients

<https://www.tandfonline.com/doi/abs/10.1080/13803395.2016.1233940?journalCode=ncen20>

This study provides evidence of postoperative cognitive dysfunction after total joint replacement when examined using a rigorous methodology, which controlled for practice effects. (PAID ACCESS)

### The Lothian Birth Cohort 1936: A Study to Examine Influences on Cognitive Ageing from age 11 to age 70 and Beyond <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2222601/>

This follow-up cohort study investigated genetic and other influences on cognitive change in aging. (OPEN ACCESS)

### Impact of Mind-Body Interventions in Older Adults with Mild Cognitive Impairment: A Systematic Review <https://doi.org/10.1017/S1041610218002302>

The aim of the present study was to review the impact of different non-pharmacological programs based on mind-body intervention for older adults and MCI. (OPEN ACCESS)

### Effects of Commonly Prescribed Drugs on Cognition and Mild Cognitive Impairment in Healthy Elderly People <https://journals.sagepub.com/doi/10.1177/0269881119857206>

The aim of this study was to investigate the effects of commonly prescribed medications on cognitive performance in a cohort of cognitively normal older adults. (PAID ACCESS)

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### Prevalence of Word Retrieval Complaint and Prediction of Dementia in a Population-Based Study of Elderly Subjects <https://www.karger.com/Article/Abstract/342594>

This study investigated the relationship between proper name retrieval concerns and risk of dementia. (PAID ACCESS)

### A Meta-Analysis of Cognitive Functioning in Older Adults with PTSD

<https://www.sciencedirect.com/science/article/abs/pii/S0887618513000030?via%3Dihub>

This meta-analysis was conducted to summarize and integrate the literature on the cognitive functioning of older adults with posttraumatic stress disorder. (PAID ACCESS)

### Stress Hormones, Sleep Deprivation and Cognition in Older Adults

<https://www.sciencedirect.com/science/article/abs/pii/S0378512213001904?via%3Dihub>

In this review, the authors address the relationship between stress hormones and cognitive function in older persons focusing on the role of one of the main stress factors, such as sleep deprivation. (PAID ACCESS)

### Effects of Laughter Therapy on Depression, Cognition and Sleep Among the Community-Dwelling Elderly <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1447-0594.2010.00680.x>

The authors investigated the effects of laughter therapy on depression, cognitive function, quality of life and sleep of the elderly in a community setting. (PAID ACCESS)

### Multiple Self-Reported Sleep Measures are Differentially Associated with Cognitive Performance in Community-Dwelling Nondemented Elderly

<https://psycnet.apa.org/record/2017-46730-001>

The objective of this study was to examine associations between daytime and insomnia-related sleep problems with different domains of cognitive functioning to determine whether subclinical depressive symptoms and age moderate these associations. (PAID ACCESS)

### The Link Between Sleep-Disordered Breathing and Cognition in the Elderly

<https://n.neurology.org/content/88/5/424.long>

This article discusses the relationship between sleep-disordered breathing and cognitive impairment in the elderly. (PAID ACCESS)

### Ambient Air Pollution, Noise, and Late-Life Cognitive Decline and Dementia Risk

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6544148/>

A strong body of evidence links air pollution, and recently noise, to cardiovascular conditions that eventually may also affect cognition in the elderly. This review summarizes current findings and discusses methodological challenges and opportunities for research. (OPEN ACCESS)

### Cognition and Health Literacy in Older Adults' Recall of Self-Care Information

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5881765/pdf/gnv091.pdf>

The authors investigated the relationship between a commonly used measure of health literacy and comprehension of health information among older adults. (OPEN ACCESS)

### Health Literacy and Cognitive Performance in Older Adults

<https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1532-5415.2009.02347.x>

The authors conducted a cross-sectional cohort study to investigate the relationship between health literacy and memory and verbal fluency in older adults. (PAID ACCESS)