

Journal Article	Page
How obesity makes memory go bad	2
Lack of deep sleep may set the stage for Alzheimer's	2
Irritable bowel syndrome is associated with an increased risk of dementia: A nationwide population-based study	2
Influence of combined physical and cognitive training on cognition: A systematic review	3
Nutrition's link to brain health	3
Adult women diagnosed with ADHD may face increased risk of mental health conditions, suicidal thoughts	4

➤ **How obesity makes memory go bad**

Researchers from University of Alabama at Birmingham have found that epigenetic changes dysregulate memory-associated genes, and a particular enzyme in brain neurons of the hippocampus appears to be a link between chronic obesity and cognitive decline. Four specific genes in the brain's hippocampus are altered when chronic obesity is present, causing neurons to affect memory impairment. The study, which was based on mice, showed that changes in gene expression began to affect memory after only five-months of diet-induced obesity, and got worse over time. Consumption of resveratrol, an antioxidant found in the skins of red grapes and other berries, led to better memory recall and preserved the functioning of the hippocampus.

Hansen, J. How obesity makes memory go bad. UAB News.

Full text article can be accessed here

<http://www.uab.edu/news/innovation/item/6911-how-obesity-makes-memory-go-bad>

➤ **Lack of deep sleep may set the stage for Alzheimer's**

Research conducted at Oregon Health and Science University in Portland found that changes in sleep habits may actually set the stage for dementia. The brain clears out toxins linked to Alzheimer's during sleep. Two recent discoveries have suggested that the relationship may be more complicated than the simple explanation that the disease was "taking out the centers of the brain that are responsible for regulating sleep." In 2009, researchers at Washington University in St. Louis showed that the sticky amyloid plaques associated with Alzheimer's develop more quickly in the brains of sleep-deprived mice. In 2013, it was found that a remarkable cleansing process took place in the brains of animals during deep sleep, known as glymphatic system. However, researchers need to study this cleansing process in people to know for sure.

Hamilton, J. Lack of deep sleep may set the stage for Alzheimer's. NPR.

Full text article can be accessed here

<http://www.npr.org/sections/health-shots/2016/01/04/460620606/lack-of-deep-sleep-may-set-the-stage-for-alzheimers>

➤ **Irritable bowel syndrome is associated with an increased risk of dementia: A nationwide population-based study**

Irritable bowel syndrome (IBS) is characterised by recurrent abdominal pain or discomfort with altered visceral hypersensitivity or gastrointestinal motility. One of the relevant pathophysiological mechanisms for the development of IBS is an abnormal interaction in the brain-gut axis. The brain-gut axis has been demonstrated as being crucial for the maintenance of cognitive performance. This study assessed the risk of dementia following diagnosis of IBS among the Taiwanese population. It found that IBS was associated with an increased risk of dementia in patients older than 50 years in both male and female, and in those with or without comorbidity.

Chen, C., Lin, C. & Kao, C. Irritable bowel syndrome is associated with an increased risk of dementia: A nationwide population-based study. *PLOS One*.

Full text article can be accessed here

<http://journals.plos.org/plosone/article/asset?id=10.1371%2Fjournal.pone.0144589.PDF>

➤ **Influence of combined physical and cognitive training on cognition: A systematic review**

Training of physical and cognitive abilities helps prevent or slow down the age-related decline of cognition. This review assesses the role of combined physical and cognitive training characteristics in improving cognitive performance and proposes an effective training scheme. Cardiovascular and strength training combined with cognitive training of attention and/or executive function/working memory seem to be an integral part of an effective training programme. Training characteristics such as length, frequency, duration, intensity and level of task difficulty seem to determine cognitive performance.

Lauenroth, A., Ioannidis, A. & Teichmann. Influence of combined physical and cognitive training on cognition: A systematic review. BMC Geriatrics.

Full text article can be accessed here

<http://bmcgeriatr.biomedcentral.com/articles/10.1186/s12877-016-0315-1>

➤ **Nutrition's link to brain health**

New research suggests that a healthy diet and lifestyle choices starting at an early age and continuing throughout one's lifespan may prolong brain function. Foods rich in antioxidants, phytochemicals and the B vitamins found in fruits, vegetables, whole grains, legumes and fish show more promise in promoting brain health in older adults. Caregivers of older adults can prepare meals that are rich in vitamin B by incorporating beans and vegetables in soups and stews, blended vegetables for sauces, adding beans and vegetables to common dishes, preparing international cuisine that have more beans, including berries and incorporating tea in the diet as it may be beneficial for slowing down cognitive decline.

Ruscigno, M. Nutrition's link to brain health. Today's Geriatric Medicine, 9(4): 18.

Full text article can be accessed here

<http://www.todaysgeriatricmedicine.com/archive/JA16p18.shtml>

➤ **Adult women diagnosed with ADHD may face increased risk of mental health conditions, suicidal thoughts**

According to a new study, conducted by researchers from the University of Toronto in Canada, one-third of women with attention deficit hyperactivity disorder (ADHD) had anxiety disorders and almost half of this group had considered suicide. Women with ADHD had triple the prevalence of insomnia, chronic pain, suicidal ideation, childhood sexual abuse and generalised anxiety disorder and double the prevalence of substance abuse, current smoking, depressive disorders, severe poverty and childhood physical abuse in comparison with women without ADHD.

Dovey, D. Adult women diagnosed with ADHD may face increased risk of mental health conditions, suicidal thoughts. Medical Daily.

Full text article can be accessed here
<http://www.medicaldaily.com/adhd-adults-women-mental-health-suicidal-thoughts-392463>