## Research in the News



## June 2020

- Researchers say repetitive negative thinking may be the new risk factor for dementia. A study of more than 350 people over the age of 55 in the UK showed that participants who who were prone to worrying about the past or future had higher levels of tau and beta amyloid in the brain, and worse memory and mental cognition than people who were more positive. The researchers stress that short-term worry or negative thinking is not a risk factor, but rather long-term, repeated rumination and obsession over negative aspects of one's life. Meditation, mindfulness, practicing gratefulness, and journaling can help to improve outlook and reframe pessimism. <u>Read more</u>
- 2. Flavonoids are well-known for their cancer-fighting, anti-inflammatory and antioxidant properties. Now, researchers say regular consumption of flavonoids (found in most fruit,vegetables and legumes) may reduce the risk of developing dementia. Three specific classes of flavonoids (flavanols, anthocyanins, and flavonoid polymers) were found to be particularly beneficial. The scientists looked at foods such as pears, blueberries, apples, orange juice, tea and red wine; test subjects who consumed more of these foods were found to have a reduced risk of developing dementia, regardless of age, gender, education level, hypertension, diabetes or smoking. Read more
- MHBA, an acid found in bitter hops could play a role in combating cognitive decline, according to research from Japanese scientists. Tests conducted on 100 healthy people with SCD (Selective Cognitive Decline) showed that a daily dose of MHBA improved mental processing speed, attention and concentration, and reduced mental stress. The test subjects demonstrated better memory recall and improved aptitude to mental puzzles. <u>Read more</u>
- 4. General practitioners are urged to take their patient's concerns about problems with memory seriously, according to a new study from UNSW's Centre for Healthy Brain Ageing. Increasingly, research suggests subjective cognitive complaints (an individual's self-experience of cognitive decline) may be the earliest sign of preclinical dementia. The study, which assessed over 800 people and utilised information supplied by their support person to track their decline in memory and executive function, emphasised the "importance of an older adult's subjective presentations and the relevance of the perceptions of informants in relation to predicting cognitive decline." <u>Read more</u>



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5. MicroRNAs (tiny sequences of molecules vital to development, growth and survival) were previously thought by scientists to be "junk" genetic material. Now, researchers say, they may be the key to diagnosing, monitoring and even treating diseases such as cancer and dementia. MicroRNAs can prevent genes from creating new protein molecules by blocking and binding to the relevant genetic codes. They are involved in the accumulation of toxic proteins in the brain and can cause cancerous cells to develop. Researchers are now trialling a range of microRNA biomarkers as potential clinical methods for diagnosing disease, such as detecting the early stages of Alzheimer's from blood samples.

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- 6. Inflammatory bowel diseases, such as Crohn's disease and ulcerative colitis, may increase the risk of developing dementia, according to new research, published in the online journal, *Gut*. Dementia is diagnosed, on average, 7 years earlier in people with Irritable Bowel Disease (IBD), with Azheimer's being the most common. Research suggests that the relationship between gut bacteria (microbiome) and the central nervous system plays a role in various aspects of physical and cognitive health; IBD is thought to develop from an impaired immune response to changes in the microbiome. <u>Read more</u>
- 7. A recent article discusses the evidence and potential for food and food bioactive components to reduce the prevalence of dementia in the community. While there are no drugs treatments that can halt or prevent dementia, changes in lifestyle and diet that reduce risk and delay onset of dementia by five years or more, could halve cases of dementia over 50 years. Read more
- Two new studies, known as the Air-Noise-Dementia project and the AERONoSE project, focus on the effects of aircraft noise and traffic-related air pollution, and their possible links to dementia risk. The four and five year studies will look at the relationship between olfactory pathways and cognitive health and will study how exposures to pollutants affect brain structure and cerebrovascular disease, changes that are visible via brain imaging. <u>Read more</u>