

Alzheimer's Disease Detect & Prevent

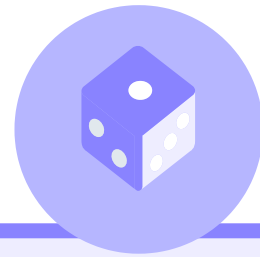
**An innovative EU-funded project developing a
robust digital tool that enables the early
detection of Alzheimer's disease**



The “AD Detect and Prevent” project, coordinated by the Danish digital therapeutics company Brain+, is pursuing the ambitious goal of developing a robust digital tool to improve the detection of Alzheimer's disease (AD) prior to the possible onset of dementia and combining this with lifestyle programmes for reducing lifestyle risk related to AD dementia.



The AD Detect and Prevent project aims to gamify a novel method developed by Oxford University, – a cognitive test on working memory (one of the first cognitive domains to be affected). It has been shown to be highly sensitive in identifying individuals at an elevated risk of AD but are asymptomatic, thus allowing for AD detection before overt clinical symptom onset.



With results from the AD detection component that is integrated on the Brain+ digital platform, the solution will subsequently offer personalised AD risk reduction programmes in the form of computerised cognitive training and lifestyle interventions. The goal is to reduce the risk of developing AD dementia and/or slow the progression of AD.

Detecting AD before symptoms occur can be extremely challenging and diagnosis is often made late in the disease process. When this condition is diagnosed, it has often already caused significant nerve damage resulting in impaired memory, thought processes, behaviour, social skills, etc.



What is Alzheimer's Disease (AD)?

AD is a neurodegenerative disease that slowly and progressively destroys brain cells.

It is the underlying cause in 70% of dementia cases.

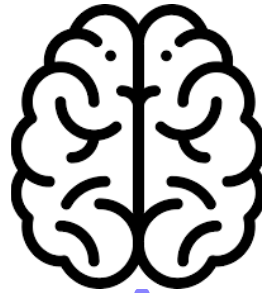
AD has long been considered as a form of dementia. Currently, however, the disease is described as a continuum beginning with a phase where the person has no overt symptoms but there are pathological biomarkers present in the brain, leading up to the dementia phase.

What is dementia?

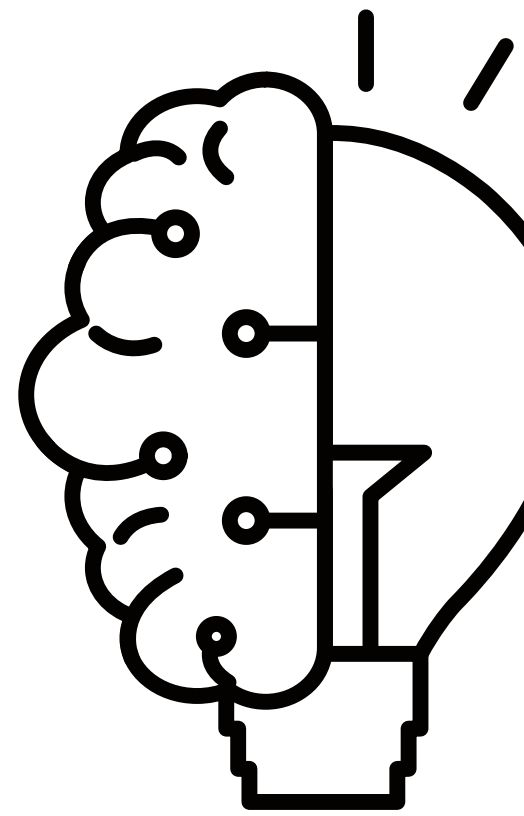
Dementia can be described as a set of symptoms caused by one or more disorders affecting the brain.

Dementia has a significant social, physical and psychological impact on individuals and people around them.

The most common cause of dementia is AD. Symptoms of AD dementia (e.g. memory loss, difficulties with thinking, problem-solving, language, communication and disorientation) are sufficiently severe to interfere with independence in activities of daily living.

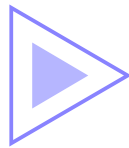


As yet, there is no cure for AD or AD dementia



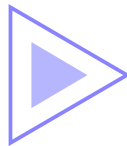
Key Facts

8.9 million



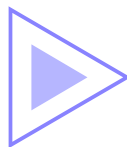
Estimated people living with dementia in EU member states in 2018.

60%



Expected rise in the number of people living with dementia in EU countries over the next two decades.

16.3 million



Expected overall number of people living with dementia in EU countries in 2050.



Alzheimer's Disease
Detect & Prevent

Consortium

Brain+



The Danish Brain+ ApS, founded in 2012 by 3 co-founders, provides digital therapeutics for cognitive and mental health that combine neuro-games and digital behavioural therapy into a powerful treatment solutions, delivered on the Brain+ platform and as apps on smartphone, tablets and web. Brain+ helps people living with neurological disorders and brain injuries restore their fundamental cognitive brain functions to full health and functionality. Brain+ engages the patient in self-training on a clinically validated mobile app platform, Brain+ RECOVER, with computer games that are purpose-built for clinical cognitive neurorehabilitation and with digital behavioral therapy.

 [@TheBrainPlus](https://twitter.com/_TheBrainPlus)

 www.brain-plus.com

University of Oxford



Founded in the 12th century, University of Oxford is a world leading university located in Oxford, England. The university is the oldest university in the English-speaking world and the world's second-oldest university in continuous operation. The university is made up of a variety of institutions, including 38 constituent colleges and a full range of academic departments, which are organized into four divisions, i.e. Humanities Division; Mathematical, Physical & Life Sciences Division; Medical Sciences Division and the Social Sciences Division.

 [@UniofOxford](https://twitter.com/UniofOxford)

 www.ox.ac.uk

Aarhus University



Aarhus University is a prestigious research university located in Aarhus, Denmark. Founded in 1928, it is Denmark's second oldest university and the largest, with a total of 44.500 enrolled students as of 2016. AU is divided into four faculties, i.e. the Faculty of Arts, Aarhus BSS, the Faculty of Health and the Faculty of Science and Technology. The Neuroscience programme of the participating research centre - The Department of Nuclear Medicine & PET centre- is headed by Professor David Brooks, who is the lead scientist on the validation imaging research studies in the AD Detect and Prevent project.

 [@AarhusUni](https://twitter.com/@AarhusUni)

 www.au.dk

University of Nottingham



The University of Nottingham is a public research university in Nottingham, United Kingdom. It was founded as University College Nottingham in 1881, and was granted a royal charter in 1948. The University of Nottingham is one of the largest institutions of its kind in the UK, with a student population in the tens of thousands. The University of Nottingham's position as a world-class University is confirmed by its ranking in the global league tables.

 [@UniofNottingham](https://twitter.com/UniofNottingham)

 www.nottingham.ac.uk

Alzheimer Europe



Alzheimer Europe (AE) is a non-governmental organisation aiming to provide a voice to people with dementia and their carers, make dementia a European priority, promote a rights-based approach to dementia, support dementia research and strengthen the European dementia movement. Formed in 1990, AE is an umbrella organisation comprised of 42 member associations from 37 countries, which are all active Alzheimer organizations in Europe (WHO European Region). AE has consultative status with the Council of Europe and in 2007 set up the European Alzheimer's Alliance which has over 90 Members of the European Parliament. In 2012, AE set up the European Working Group of People with Dementia (EWGPWD), comprised of 13 people with different nationalities and types of dementia. The EWGPWD participates in all the organisation's activities and projects.

 [@AlzheimerEurope](https://twitter.com/AlzheimerEurope)

 www.alzheimer-europe.org

European Brain Council



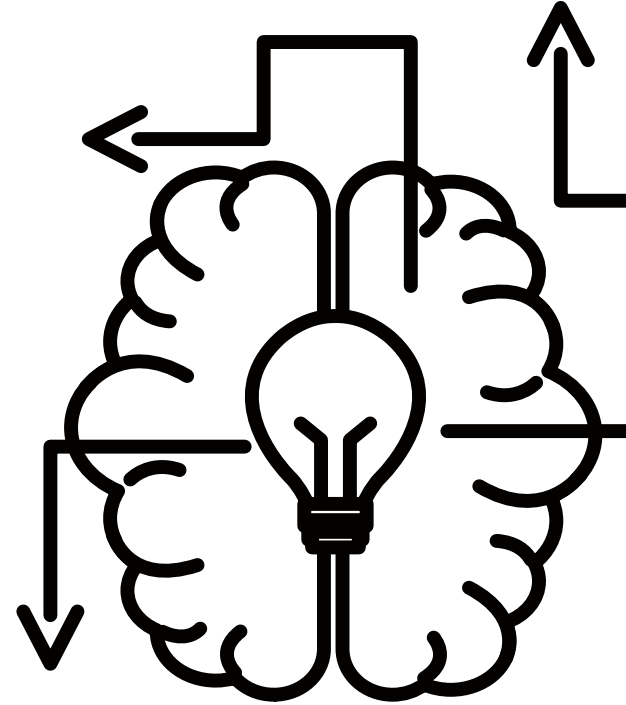
The European Brain Council (EBC) is a non-profit coordinating international health organization founded in 2002. It comprises the major organizations in the field of brain research and brain disorders in Europe, and thus its structure involves a vast network of patients, scientists and doctors, working in partnership with the pharmaceutical and medical devices industry. The mission of EBC is to promote brain research in order to improve the quality of life of those living with brain disorders in Europe. EBC's comprehensive scope makes it suited to working closely with major decision-making bodies such as the European Commission, the European Parliament and the World Health Organization (WHO). Main action areas EBC focuses on include promoting brain-related research by collaborating with member organizations, interacting with the Institutions of the European Union, fostering dialogue between scientists and society, promoting education and disseminating information about brain research and disease in Europe.

 [@EU_Brain](https://twitter.com/EU_Brain)

 www.braincouncil.eu



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