

Study: The role of sleep in Down syndrome Alzheimer's disease



Alzheimer's
Research
UK

The Power
to Defeat
Dementia

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Invitation to take part in a study

We would like to invite people with Down syndrome aged between 25-50 years old and healthy control volunteers to take part in a research study. We are interested in why some people with Down's syndrome develop Alzheimer's disease as they get older. We are investigating how Alzheimer's disease is linked to sleep problems and brain changes in people with Down's syndrome.

What is the research about?

We are interested in looking at how Alzheimer's disease develops and affects the brain in people with Down syndrome. **A 7 Tesla MRI scan uses a stronger magnet than other MRI scanners, which means the pictures of the brain are much more detailed and clear.** This allows us to examine changes to the brain which are not visible on other scans. This will help us understand why people with Down's syndrome have such a high risk for developing Alzheimer's disease, as well as what medicines could help. **We are looking at how sleep quality might relate to brain changes and memory changes.**

Participants will take part in a single research visit to Addenbrookes Hospital, which will last approximately 3-4 hours. After fully informed consent is given and safety for MRI is confirmed, there will be a 1 hour brain scan in the 7T MRI scanner, located at the Wolfson Brain Imaging Centre. A single blood sample will be taken, and then the participants will complete a sleep-related questionnaire and some short memory tasks. At this visit, participants will also be given a Fitbit, which they will wear for a period of one week to assess their sleep duration and patterns and an oximetry device to wear on their finger for 2 nights. A visit to a sleep clinic is also optional for this study.

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If you're interested in getting involved,
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