Supplementary Online Content


eAppendix. Supplemental methods and results.

This supplementary material has been provided by the authors to give readers additional information about their work.
Supplemental Methods

Actigraphy scoring

A standardized protocol was used to reconcile actigraphic and sleep diary data. In brief, the actigraph marker was given highest priority, and if missing or >30 minutes different from activity measurement, sleep diary entry was used, and if this was >60 minutes discrepant from activity measurement, then automated scoring by Actiware™ was used, to set bedtime and waketime. Any days commented as unusual in the sleep diary (for example illness) were excluded from analysis.

Sleep History Questionnaire

Participants were assessed with a Sleep History Questionnaire prior to actigraphy. This asked “Would you say that your sleep habits have been pretty much the same in the past 5 years?” Also, they were asked to estimate bedtime, wake time, sleep latency, awakenings, and nap frequency and length, for both currently and 5 years ago. This information on sleep habits was completed by 110 of the 142 participants. They were permitted to answer with a range between values, in which case the average of the values was used (for example, “2 to 3 naps per week” was treated as “2.5 naps per week”).

Apolipoprotein E

Apolipoprotein E (APOE) allele is an important risk factor for AD. APOE genotypes were provided by the Charles F. and Joanne Knight Alzheimer’s Disease Research Center Genetics Core. Positive APOEε4 allele was defined as having one or two APOEε4 alleles.
Family History

Family history information was obtained from the ADRC clinical core. Positive family history was defined as having ≥1 parent with dementia of the Alzheimer type prior to age 80.

Supplemental Results

Nap frequency

Nap frequency as assessed by sleep diary was mean 1.7 and median 1.0 days per week, while by questionnaire (completed prior to actigraphy and sleep diary) was mean 1.3 and median 0.5 days per week. While there was significant correlation between reported nap frequency by questionnaire and by diary (p < 0.001), the strength of correlation was low (R² = 0.498) in the 110 participants for whom we had both types of information.