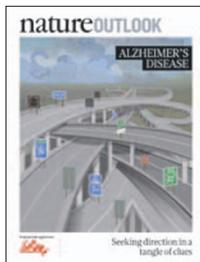


natureOUTLOOK

ALZHEIMER'S DISEASE

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The fog that envelops so many people as they age, severing them from their memories and thus from their identity, used to be considered a normal part of growing old — along with sore joints, needing reading glasses and losing touch with popular music. However, to anyone who has seen a loved one slip behind the heavy curtains of what we now call Alzheimer's disease, the decline seems anything but natural. What kind of massive malfunction in the brain can send an alert, robust, witty person into a state of persistent confusion?

The theory that plaques of amyloid- β in the brain trigger the disease has been called into question (page S12); Alzheimer's disease is a subtler foe. And without a handle on the disease's cause or genetic underpinnings (page S20), the developers of drugs (page S9) and vaccines (page S18) are working in a fog of their own. Moreover, Alzheimer's disease cannot be definitively diagnosed without an autopsy of the brain — at which point the information is rather academic, at least for that individual. So the search is intensifying for biomarkers — clues that indicate reliably whether a person who is still alive and healthy is destined for Alzheimer's disease (page S5).

The stakes are high. Alzheimer's disease is a drain not only on individuals and families, but also on societies, with the costs of care and lost productivity exceeding US\$300 billion per year, which will only increase with rising incidence. More people than ever are making it to old age, but dementia is the reward for 6 out of every 100 individuals who get past 60 years (page S2).

We can take some encouragement from the findings that there may be non-medical steps that people can take to ward off the disease (page S16) — and that the prescribed activities, such as dancing and playing games, are pleasant enough in their own right.

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Herb Brody

Supplements Editor, Nature Outlook.

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