

Boston University Alzheimer's Disease Center PAIRS Program
Dementia Knowledge Test

Please circle the most appropriate choice.

1. What is the greatest risk factor for Alzheimer's disease?
 - a. **advancing age**
 - b. having an immediate family member with Alzheimer's disease
 - c. drinking from aluminum cans or cooking in aluminum pots
 - d. apolipoprotein E (APOE) ϵ 4 status
2. One in _____ persons age 65 and over has Alzheimer's disease.
 - a. two
 - b. **eight**
 - c. twenty
 - d. forty
3. Familial Alzheimer's disease (FAD) is generally clinically and histologically indistinguishable from the typical forms of Alzheimer's disease except
 - a. there is more severe memory impairment in FAD
 - b. **FAD typically begins at a younger age**
 - c. there are fewer amyloid beta plaques in FAD patients
 - d. FAD affects a greater number of cognitive domains, including language and executive function
4. Typical symptoms of Frontotemporal dementia include
 - a. visual hallucinations and tremors
 - b. difficulty with movement and coordination
 - c. **changes in personality and behavior and difficulty with language**
 - d. all of the above
5. The least common form of dementia is
 - a. Lewy body disease
 - b. Vascular dementia
 - c. Alzheimer's disease
 - d. **Frontal-lobe dementia**
6. The major histopathologic features of Alzheimer's disease are
 - a. neurofibrillary tangles
 - b. amyloid beta peptide deposition in senile plaques and blood vessels
 - c. neuronal death
 - d. **all of the above**
7. Deterministic mutations for familial Alzheimer's disease have been found on regions of the
 - a. neuronal sortilin-related receptor (SORL1) gene
 - b. apolipoprotein E (APOE) gene
 - c. **presenilin-1 and presenilin-2 genes**
 - d. all of the above

8. Potentially reversible causes of dementia include
- Depression**
 - Vascular dementia and mixed dementias
 - Lewy body disease
 - all of the above
9. Behavioral symptoms that may be present in moderate or advanced Alzheimer's disease are
- hallucinations and delusions
 - eating and sleeping difficulties
 - physical and verbal agitation
 - all of the above**
10. Adults with one parent with familial Alzheimer's disease have a chance of developing Alzheimer's themselves.
- 0%
 - 25%
 - 50%**
 - 100%
11. _____ has sometimes been referred to as "chronic dementia" due to observations of reduced acetylcholine synthesis and devastation of cortically projecting cholinergic cells.
- Alzheimer's disease**
 - Frontotemporal dementia
 - Vascular dementia
 - Dementia with Lewy bodies
12. The term 'sundowning' refers to the
- excessive sleepiness experienced by some persons with moderate Alzheimer's disease
 - increased confusion, anxiety, agitation, and disorientation of some Alzheimer's patients that begins at dusk and continues into the night**
 - nighttime hallucinations and wandering experienced by some late-stage Alzheimer's patients
 - all of the above
13. Seven out of ten persons with Alzheimer's disease are cared for
- at home**
 - in nursing homes
 - in assisted living facilities
 - none of the above
14. The most widely accepted mechanism for the development of Alzheimer's disease is that the generation and deposition of amyloid beta leads to
- tangles
 - oxidative stress
 - inflammation and cell death
 - all of the above**

15. The largest group of informal caregivers for persons with Alzheimer's disease are
- spouses**
 - daughters
 - sons
 - sisters and brothers
16. Which type of dementia involves symptoms such as recurrent visual hallucinations and motor features of Parkinsonism?
- Alzheimer's disease
 - Frontotemporal dementia
 - Parkinson's disease
 - Dementia with Lewy bodies**
17. A definite diagnosis of Alzheimer's disease can only be reached through
- neuropsychological evaluation
 - autopsy**
 - neuroimaging (CT, PET, MRI)
 - clinical examination and history
18. Currently available pharmacologic treatments to slow the progression of Alzheimer's disease include
- acetylcholine antagonists
 - norepinephrine and dopamine reuptake inhibitors
 - NMDA receptor antagonists**
 - all of the above
19. A family history of dementia increases the relative risk of dementia by _____ times for persons up to age 80.
- 2
 - 3-4**
 - 10
 - zero
20. The morphologic and biochemical origins of Alzheimer's disease are present in the early years of individuals with
- Down syndrome**
 - Moyamoya disease
 - Cerebral palsy
 - all of the above
21. Memory loss is a natural part of aging. (T / **F**)
22. Language difficulties, visuospatial problems, and executive functioning deficits are all symptoms of Alzheimer's disease. (**T** / F)
23. High blood pressure high cholesterol, and type 2 diabetes are all risk factors for cognitive decline. (**T** / F)
24. In order to be diagnosed as having dementia, the decline in cognitive abilities must be severe enough to interfere with daily life. (**T** / F)
25. Caucasians are more likely than African Americans to develop Alzheimer's disease. (T / **F**)

26. The presence of a single apolipoprotein E ϵ 4 allele triples the risk of developing Alzheimer's disease. (T / F)
27. Approximately a half million Americans under the age of 65 have dementia. (T / F)
28. Having silver dental fillings could slightly increase your risk of developing Alzheimer's disease. (T / F)
29. Men are at a higher risk for Alzheimer's disease than women. (T / F)
30. Mental inactivity during midlife is associated with an increased risk for Alzheimer's disease. (T / F)
31. All cases of "mild cognitive impairment" typically eventually progress to Alzheimer's disease. (T / F)
32. There are treatments available to stop the progression of Alzheimer's disease. (T / F)
33. A history of depression may increase the risk of developing Alzheimer's disease later in life. (T / F)
34. Among persons over age 65, Alzheimer's disease is the 5th leading cause of death. (T / F)
35. Family and other unpaid caregivers of persons with Alzheimer's disease and dementia often experience higher levels of stress hormones and reduced immune function. (T / F)
36. Studies have shown that exercise may reduce the risk of Alzheimer's disease by preventing amyloid beta deposition. (T / F)
37. The type of Alzheimer's that is caused by deterministic genes, familial Alzheimer's disease, accounts for 20% of all cases. (T / F)
38. Normal pressure hydrocephalus can be a reversible cause of dementia. (T / F)
39. Some people live with Alzheimer's disease for up to 20 years. (T / F)
40. Drinking out of aluminum cans and cooking in aluminum pots and pans may slightly increase the risk of Alzheimer's disease. (T / F)
41. Within 5 years of their diagnosis, around 60% of people with "mild cognitive impairment" will develop Alzheimer's disease. (T / F)
42. Alzheimer's disease is less common in cultures that eat a lot of fish. (T / F)
43. There are treatments available that will help delay the progression of cognitive decline for some people with Alzheimer's disease. (T / F)
44. Studies have shown that head injury does not increase your risk for Alzheimer's disease. (T / F)
45. A person with Alzheimer's disease will live 4-6 years on average. (T / F)
46. A nutritious diet, exercise, social engagement, and mentally stimulating pursuits may help reduce the risk of cognitive decline and Alzheimer's disease. (T / F)
47. Wandering and pacing are common behaviors of a person with Alzheimer's disease. (T / F)
48. Low education is a risk factor for Alzheimer's disease. (T / F)
49. After being diagnosed with "mild cognitive impairment", some people will revert back to normal cognition. (T / F)

50. In order to avoid stressful communication, it is helpful to speak to an Alzheimer's patient using logical reasoning. (T / **F**)
51. In general eating and lifestyle habits that are bad for your heart are also bad for your brain. (**T** / F)
52. Studies show that moderate drinking (2-3/day) is associated with worse cognition. (T / **F**)
53. Half of all persons age 85 and older have Alzheimer's disease. (**T** / F)
54. Being fat in your 40s can raise your risk of developing dementia later in life. (**T** / F)
55. Almost all cases of Alzheimer's disease will first go through a prodromal stage of the disease, which is called "mild cognitive impairment". (**T** / F)
56. Redirecting and validation therapy are helpful techniques to use in communication with cognitively impaired persons. (**T** / F)
57. Universal evidence has shown that elevated lipids and cholesterol are risk factors for Alzheimer's disease. (T / **F**)
58. Depressive symptoms often coexist with dementia. (**T** / F)
59. Early-stage and moderate Alzheimer's disease patients often have the most difficulty remembering long-term memories, as opposed to new information. (T / **F**)
60. One third of people who have Parkinson's disease will develop dementia in the later stages of the disease. (**T** / F)
61. Social and conversational skills are often so well preserved in someone with mild or early-stage Alzheimer's disease that these patients often appear normal to the casual observer. (**T** / F)
62. Stroke is associated with increased risk of Alzheimer's disease and cognitive decline. (**T** / F)
63. An electroencephalogram (EEG) is a useful routine diagnostic tool for the evaluation of cognitive impairment in older persons. (T / **F**)
64. Overmedication is a reversible cause of dementia. (**T** / F)