

Postmenopausal Hormone Therapy and Cognition

Today, there are an estimated 7.2 million Americans 65 and older living with Alzheimer's dementia, and nearly two-thirds of those are women. Despite the wide range of neurologic symptoms that many women experience during perimenopause and menopause, research about the impact of postmenopausal hormone therapy on brain health and cognition still has many outstanding questions on potential risks, benefits, and optimal treatment paradigms.

Postmenopausal hormone therapy — also sometimes referred to as menopausal hormone therapy or hormone replacement therapy — is an important tool for managing the symptoms of menopause. Some of these symptoms, such as altered mood and sleep, may adversely impact women's day-to-day cognitive functioning. However, there is little evidence that treating menopausal symptoms with current therapies leads to meaningful long-term benefits or harms in memory, attention, or overall cognitive functioning that extend to women later in their lives.

As women transition past menopause, their brain metabolism changes to adapt to the loss of estrogen. There is strong evidence from randomized clinical trials that initiation or re-initiation of hormone therapy regimens based on conjugated equine estrogens in postmenopausal women aged 65 years or older increases risks for dementia. It appears that this is due to an increase in brain atrophy, the loss of brain cells, thereby putting women at increased risk for cognitive impairment, including Alzheimer's disease. Whether other hormone therapy regimens also increase risks in older postmenopausal women has not been established by large clinical studies.

There are likely considerations regarding therapy formulation, dose, and delivery approach that may impact different results and effectiveness based on a person's overall genetics, health, menopause onset, and duration of treatment.

Ultimately, much more research is needed around postmenopausal hormone therapy in general and as it relates to cognitive health in all populations. People interested in initiating postmenopausal hormone therapy for its known benefits of improving postmenopausal symptoms should consider risk, potential type, and dosing options with their health care provider to make an informed decision regarding their treatment path.

— Alzheimer's Association Medical and Scientific Advisory Group, reviewed November 2025