



# The Consumer's Guide To The Role Of Hormone Replacement Therapy In Growing Older With A Healthy Mind

---

## 1. Can hormone therapy help an older woman reduce her risk for developing Alzheimer's disease?

Young women make adult amounts of sex hormones such as estrogen and progesterone. During menopause, several hormone levels change in a woman's body and estrogen levels drop after age 50. The loss of estrogen produces many symptoms of menopause. Replacement of estrogen and progesterone is referred to as HRT or hormone replacement therapy.

The brains of all humans are sensitive to estrogen. These sex hormones work by sending signals and altering brain function in both men and women. These hormonal sensitivities explain some psychological alterations that occur during pregnancy and menopause.

Beginning in 1990, scientists recognized that some women who take hormone replacement therapy during menopause seem to have less risk for developing dementia in later life. This observation caused more scientists to examine whether hormones can protect intellectual function and numerous additional studies examined different groups, different types of hormone replacement, and different kinds of side effects or complications from these medicines. Studies suggest that hormone treatment after menopause may increase the risk for stroke, blood clot, and several other complications in women who take hormones as compared to women who take no hormones. Scientist could not agree on whether women with hormone replacement therapy enjoy some protection from intellectual loss in later life. Hormone replacement therapy may protect older women against symptoms of menopause and may protect against osteoporosis (bone softening). Scientists cannot predict which women will benefit from the medication, at what age, in what strength, and for what length of time.

## 2. What is the best recommendation for hormone replacement therapy in women?

The best recommendation for hormone treatment is that older women should have a careful, thoughtful discussion with a doctor who understands older women's health. Hormone replacement treatment should not be prescribed as a prevention strategy for dementia; however, hormone treatment may be highly beneficial to some patients for other health problems, such as menopausal symptoms or osteoporosis. Any woman who receives hormone therapy should be monitored by their doctor and fully informed about potential complications, such as blood clots in the leg or the lung. Hormone replacement therapy in older women is safe and beneficial to many older women. Some women who receive

hormone replacement treatment may also experience some protective effect against intellectual decline or dementia. For details of the scientific evidence that support this fact sheet, please see DETA 2513.71, entitled “*Basic Facts For The Primary Care Physician On Hormone Replacement Therapy as a Preventive Strategy for Dementia in Women and Men*”. Future research may help doctors identify women who should use hormone therapy to protect intellectual function over age 65.

### **Recommendations:**

1. Women should discuss hormone replacement therapy (HRT) with a doctor who is an expert on this subject.
2. Hormone replacement therapy (HRT) is not recommended as a preventive intervention for dementia.
3. “Natural” hormones or herbs that are sold as food supplements do not prevent dementia.

## **Does Male Hormone Replacement Therapy Help Protect the Brain of Older Men from Alzheimer’s Disease?**

While most persons know about menopause for women, men also undergo hormonal changes with aging referred to as “andropause”. Older men begin to experience diminished production of the male hormone called “testosterone”. Reduction of testosterone does not eliminate the male’s ability to reproduce; however, this change may cause other alterations, such as muscle loss or erectile difficulties.

Men can take testosterone pills to replace hormones lost through aging. Some studies suggest that the loss of testosterone in males may increase the risk for intellectual loss in later life. Scientific studies do not show that hormone replacement will protect an older man from developing Alzheimer’s disease or losing intellectual function. These studies will be performed over the next decade and should provide valuable information for the aging male population.

Hormone replacement therapy with testosterone appears to be relatively safe; however, more studies will be required to examine the long-term effect of testosterone on tissue that is sensitive to male hormones such as the prostate gland. Male hormone replacement therapy is not indicated for older individuals because its beneficial effect on intellect is unclear and the medications may have the potential for producing side effects.

Future research will clarify the role of testosterone in the aging process of males and possible clinical markers for men who might benefit from long-term hormone replacement therapy.

### **Suggested Actions:**

1. Testosterone therapy for older men is not presently used to slow aging or prevent dementia.
2. Over-the-counter “male hormone supplements” are not shown to improve memory.