The Women’s Health Initiative (WHI) continues to provide answers to important questions about women’s health, thanks to WHI participants like you! In early March of this year the National Institutes of Health (NIH) asked women in the Estrogen-Alone study of the WHI Hormone Program to stop their study pills. After nearly 7 years of follow-up, the NIH believed that there was enough data to answer the main study question, and the balance of benefits and risks of conjugated equine estrogens (CEE) alone was not likely to change further. We now have more complete details to share with you about these important findings.

The WHI Hormone Program
You probably recall that there are two studies in the WHI Hormone Program—the Estrogen-plus-Progestin study for women who had not had a hysterectomy before joining and the Estrogen-Alone study for women who already had a hysterectomy before joining.

Estrogen-Alone Study Findings
The graph below shows the main Estrogen-Alone findings. To understand the risks and benefits of CEE, WHI scientists looked at the number of women who had disease events that CEE might affect. Two of these diseases were clearly affected. Women taking CEE (darker bars) had more strokes than those taking placebo (lighter bars).

On the benefit side, women taking CEE had fewer hip fractures. For other diseases of interest, the picture was not clear. Either there were no effects of CEE or the data were not strong enough for scientists to be sure they were real. For example, the unexpected finding that fewer women taking CEE had breast cancer needs further study. The effect of CEE on blood clots was also uncertain. We consider CEE to have no important (neutral) effect on heart attacks, colorectal cancer, and death because the differences were very small.

How many women were affected?
The number of women who were diagnosed with any of these diseases was about equal in the CEE and placebo groups.

Effects of Estrogen-Alone and Placebo on Disease Rates

![Graph showing the effects of Estrogen-Alone and Placebo on disease rates.](image-url)
During one year, for every 10,000 women taking CEE, we saw:

- 12 more women with stroke. Looking at the graph, you can see that 44 women in the CEE group had strokes compared to 32 women in the placebo group.
  - Possibly more women with blood clots. There were more blood clots in the legs (6 more women taking CEE had deep vein thrombosis or DVT). It was not clear if more women taking CEE had blood clots in the lungs, and we are doing further data analyses on these effects.
- 6 fewer women with hip fractures.
  - Possibly 7 fewer breast cancers. However, this effect is uncertain, and more detailed data analyses are underway.

In summary, taking into account all of the diseases studied during 6.8 years of follow-up in the Estrogen-Alone study, we found no overall benefit and conclude that CEE should not be used to prevent chronic disease overall, and heart disease in particular.

**How do these new Estrogen-Alone findings compare to the July 2002 Estrogen-plus-Progestin results?**

Estrogen-Plus-Progestin study participants were asked to stop their study pills in July 2002. At that time, with 5.2 years of follow-up, the data showed that there were more risks than benefits of taking CEE plus progestin. We have learned a great deal of information from the Estrogen-plus-Progestin study. These findings are described on the WHI participant website at http://www.whi.org.

In the Estrogen-plus-Progestin study, women taking combined CEE plus progestin had more heart attacks, strokes, blood clots, and breast cancers compared to women taking placebo. Women taking CEE plus progestin also had fewer colorectal cancers and hip fractures, and there was no effect on the number of deaths.

The increased risk of stroke and the decreased risk of fractures we now see in women taking CEE alone are similar to the effects of CEE plus progestin. However, the findings that CEE did not increase breast cancers or decrease colorectal cancers were different from the Estrogen-Plus-Progestin results. The reasons for these differences will be a major focus of data analyses over the next several months. For example, it may be that certain health factors are different for women who have a hysterectomy compared to those who have not. Or it may be that progestin changes disease risks and benefits when added to CEE.

**What does this mean for me as a WHI participant?**

**If you are in the Estrogen-Alone Study**, you should have already stopped taking your study pills, and we thank you for filling out your health update. Your WHI clinic staff can tell you if you were assigned to active CEE or placebo. We also ask that you return any left-over pills to your clinic. You should continue having your yearly mammograms and WHI visits. Your ongoing participation will help us learn how health effects of hormones change after they are stopped.

**If you are in other WHI programs**, everything else in WHI stays the same. Many more questions need to be answered to help women and their doctors make better decisions about women’s health. If you currently take estrogen alone by prescription, outside of WHI, you may wish to take these results to your physician and discuss what they mean for you.

**How can I find out more?**

This update reviews the information we have now. You may find more details on the World Wide Web (http://www.whi.org). Early results from the WHI Memory Study (WHIMS) suggest that there may be some increased risk of problems with cognition (memory and thinking) in women taking CEE compared to placebo. We will have more details from that study within the next few months. WHI scientists will also do more data analyses over the coming weeks and months. We will keep you informed as these results become available.

**Thank you!**

Thank you for your part in this landmark study. You have helped to answer important health questions for postmenopausal women throughout the world. We still have work to do and hope that you will join with us in continuing this effort.