Why Should Women Take Replacement Hormones?

The Benefits of Hormone Therapy

Robert P. Goldman, MD

Perhaps you recently entered menopause or had a hysterectomy that required removal of the ovaries. Maybe you are taking hormone therapy but still feel guarded about the decision. Unfortunately there is so much conflicting information. Prior to the summer of 2000, doctors had nothing but great things to say about hormone therapy. In July of 2002, the Women’s Health Initiative (WHI) study came out and suddenly the entire world was citing negative, frightening remarks regarding the use of hormones. I hope to shed a little light on where the science stands now, and help with the decision making progress -- is hormone replacement therapy (HRT) right for you?

Let’s take a look.

What hormones are we talking about?
A woman’s ovaries and a man’s testicles naturally make two kinds of estrogen (along with progesterone and testosterone). As women age, they will lose the ability to make progesterone, which can result in irregular or heavy periods. Around the age of fifty, estrogen production declines. This is frequently associated with hot flashes or vaginal dryness. Testosterone levels in women commonly fall as well. Young men make about ten times the amount of testosterone that women make. Testosterone levels in men gradually decline, but can still be significant in old age. Men produce only minimal amounts of progesterone. All of these hormones can be supplemented or replaced.

Bioidentical hormones are exactly the same structure as hormones made by the human body. Normal levels are known, as are the proper ratios among hormones. When tests are conducted to measure hormones (before therapy), they are exactly the same as those used after bioidentical hormones are prescribed. It is not possible to measure the levels of synthetic hormones used in many replacement products and there are no “normal” values.

How can hormone therapy change the way I feel?
Uncomfortable hot flashes are a common complaint from menopausal women. Well-balanced estrogen and progesterone significantly reduces (or eliminates) hot flashes.
Estrogen wakes up the brain and improves verbal functioning – it is also needed to maintain vaginal moisture and proper functionality. Estrogen and progesterone are both needed to guard bladder function. Estrogen can suppress night sweats, but taking estrogen alone can result in disturbed REM (dream sleep). Progesterone improves thyroid function and weight control and is required to restore normal sleep patterns. Poor bladder function can also disturb sleep. Testosterone helps with decision-making. To help to increase sex drive, proper balance of all hormones (not just testosterone) is needed.

All three hormones, along with Vitamin D, calcium and magnesium, preserve bone strength and dental health. Proper sleep is vitally important -- to maintain good sleep patterns, all three hormones need to be in proper balance. Many menopausal women experience sleep deprivation, which could progress into other emotional and physical problems.

Can I take HRT for a long time?
HRT has long-term protective benefits for bones, heart, blood vessels, brain, skin, bladder and sexual function. The decline in these areas is quite gradual but becomes significantly faster without using HRT. **After the damage of aging has occurred, starting on HRT will not restore function.** Hormones are protective, but not restorative. Americans now live much longer than earlier generations. As Hubie Blake said at age 95, “If I knew I was going to live this long, I would have taken better care of myself.” If you intend to live into old age, taking care of your body is of great importance.

How does HRT affect my bones?
Strength and bone mass for both men and women, peak in the 20s and slowly decline thereafter. Our bones are alive and as we live, small cracks start to develop. Cells called osteoclasts, remove the damaged bone. Osteoblasts are repair cells that mend the hole. Estrogen slows the rate at which the osteoclasts remove the damaged bone while progesterone and testosterone stimulate the osteoblasts to repair and build new bone. Bone loss speeds up for menopausal women who have low estrogen levels and no progesterone. The testicles in aging men will make some estrogen and testosterone, which helps to protect the bone. Damaged bones with osteoporosis can never be fully repaired. **Hormone balance slows down bone loss.** Provera, the imitation progesterone that was used in the WHI study, block the good effects that progesterone and testosterone have for bone growth. There is a warning on the Depo-Provera label informing young women that using the medication can cause bone loss.

What about heart disease?
Estrogen raises good HDL and lowers bad LDL and also protects the endothelium (lining of the arteries) from damage. **Women who maintain an HRT program develop less coronary heart disease than those who do not.** Once heart damage is evident, estrogen cannot reverse the damage. Carrying some estrogen in the body during the early stages of menopause is probably an advisable course. Provera, the synthetic progestin in the WHI study, negates estrogen’s benefits but real progesterone will not.

Can hormones affect the brain?
Estrogen seems to slow the accumulation of brain plaques that cause Alzheimer’s but the data is still not clear and more study is needed. Estrogen also protects against damage to the arteries that supply blood to the brain. **Reminder: estrogen does not remove damage already present.**
What about the risk of getting breast cancer?
Over the years, many studies have been done and results are still unclear. It probably takes a decade for breast cancer to develop, yet most studies have only been conducted for a few years. **Estrogen probably has little effect on breast cancer rates or recurrence rates.** Progesterone is probably protective. It is likely that small, controlled doses of estrogen have little effect on developing breast cancer or recurring cancer rates. **To examine this issue another way, avoiding HRT will only have a small effect, if any, for reducing breast cancer risk.**

How long will I have to take hormones?
Baby Boomers have become the largest population of menopausal women in history. The science is a work in progress and it is best to take HRT one year at a time -- **and keep asking this question.** It is a new era of human history and the answers will take time.

What if I have been menopausal for a long time and never used HRT?
HRT does not reverse osteoporosis, heart disease, Alzheimer’s or breast disease. If it is too late for prevention, treatment of specific symptoms is the key. Hormone creams can restore vaginal moisture, improve sexual function and reduce vaginal and bladder infections. **Taking high doses of oral estrogen late in life can increase blood clots (and the risk of getting a blood clot), heart attack and stroke.** Beginning HRT late in menopause must be done with caution. Low dose skin, vaginal or under the tongue preparations can be used to help symptoms.