

What are the risks and benefits of taking MHT?

Benefits:

- Reduces the number of hot flashes you have, and it makes them less severe when you do have them.
- Lowers your risk of osteoporosis. Estrogen slows bone thinning and helps increase bone strength.
- Prevents vaginal dryness and soreness caused by low estrogen.
- Reduces the risk of Alzheimer's
- Reduces the risk of cardiovascular disease

Risks:

- Uterine cancer (if taken without progesterone)
- Heart attack (only if taken when there is already atherosclerosis plaque present- usually later in life)
- Stroke (only if taken when there is already atherosclerosis plaque present- usually later in life)
- Blood clots (mitigated by non-oral medications)
- Breast cancer (when taken with progesterone)

What is the difference between cyclic and continuous MHT?

For women who are still having periods, cyclic MHT involves taking estrogen continuously and progesterone in the first half of the cycle (day 1-14). This regimen reduces the risk of breast cancer.

I'm hearing conflicting statements about the risk of MHT- some say estrogen reduces the risk of breast cancer, then I hear that MHT definitely increases the risk- which is it?

The risk of breast cancer is increased when progesterone and estrogen are taken in combination, and the risk can be influenced by:

- Age at which it is started
- Length of use
- Type of estrogen and progesterone
- Dosage

Research shows that less than one additional case of breast cancer occurs per 1,000 women per year of MHT use, and three additional cases occur per 1,000 women when MHT is used for five years. Higher dose combinations of estrogen and progesterone increase the risk more than lower dose combinations.

Here is an excerpt from [Breastcancer.org](https://www.breastcancer.org):

Based on results from the very large Women's Health Initiative studies, combination HRT increases breast cancer risk and this increase in risk lasted for more than 10 years after the women stopped taking HRT. Higher-dose combination HRT increases breast cancer risk more than lower-dose combination HRT. Combination HRT also increases the likelihood that the cancer may be found at a more advanced stage. Combination HRT is linked to increased breast density, which can make it harder for mammograms to detect breast cancer. Breast cancer risk appears to be higher with daily progesterone (continuous combination HRT) than with less frequent progesterone (sequential or cyclical combination HRT).

But the role progesterone plays in breast cancer risk is not so clear, as some have pointed out progesterone reduces the risk of breast cancer because it can decrease cell growth and encourage cell specialization in some cases. But in other cases, it can promote breast cancer cell proliferation.

The same can be said for estrogen. Some have pointed out that estrogen can be protective against breast cancer since those who took estrogen alone (without progesterone) had a lower risk of breast cancer.

What is known overall is that the risk is greater when progesterone and estrogen are combined. Combined P and E could in turn be beneficial to some women but it is just not possible to distinguish at this point who will benefit and who will be at risk.

It is also not clear whether the bioidentical forms of estrogen and progesterone are safer when it comes to breast cancer risk and most studies have only looked at the effect of synthetic estrogen. However, the findings of a meta-analysis found that when using the bioidentical micronising progesterone:

Based on a systematic literature review on the impact of menopausal hormone therapy (MHT) containing micronized progesterone on the mammary gland, an

international expert panel's recommendations are as follows: (1) estrogens combined with oral (approved) or vaginal (off-label use) micronized progesterone do not increase breast cancer risk for up to 5 years of treatment duration; (2) there is limited evidence that estrogens combined with oral micronized progesterone applied for more than 5 years are associated with an increased breast cancer risk; and (3) counseling on combined MHT should cover breast cancer risk - regardless of the progestogen chosen. Yet, women should also be counseled on other modifiable and non-modifiable breast cancer risk actors in order to balance the impact of combined MHT on the breast.

Source: <https://pubmed.ncbi.nlm.nih.gov/29384406/>

So, what is the safest way to take MHT?

Estrogen and progesterone should be taken together to reduce the risk of uterine cancer in those with a uterus. At this point, with the information we have, most doctors recommend taking the lowest dose to manage uncomfortable symptoms. There seems to be a sweet spot in terms of dosing where symptoms are managed and there are few side effects. It's a good idea to keep track of symptom improvement and the onset of any new symptoms as any changes or lack thereof might be a sign that the dosage is too high or too low. MHT is safest when taken for fewer than 5 years and some believe that over time, as more is known, longer courses could be recommended. To reduce all risks associated with MHT, it is recommended that treatment be started before the age of 60 or within 10 years of menopause.

What are the side effects of MHT?

- Breast tenderness
- Vaginal bleeding
- Weight gain (though can also cause weight loss or slower weight gain)
- Bloating
- Acne (can be a sign that
- Drowsiness (progesterone has a sedating effect, this is why progesterone it is best taken at night)

What are bioidentical hormones?

Some prescribed hormones are similar but not identical to your natural hormones. This means that they will bind to the hormone receptors in your body and trigger similar actions, but because they are not exactly the same, they might have different effects as well. Bioidentical are

the same as your body's natural hormones and act in similar ways. Most women taking bioidentical hormones in Canada are taking an oral micronized progesterone and 17-beta estradiol in a variety of delivery systems. These are readily available at pharmacies, they do not need to be compounded. Compounded bioidenticals are more popular in the US but private clinics in Canada also prescribe them. Compounded MHT usually contains estradiol along with another form of estrogen called estriol.

Are there any benefits to taking progesterone aside from reducing the risk of uterine cancer?

You might hear women complain about their progesterone therapy, but it is likely because they are taking a synthetic form (Dydrogesterone, medroxyprogesterone acetate, cyproterone acetate, norgestrel acetate, trimegestone, and promegestone) which can cause uncomfortable symptoms like bloating, fatigue, and irritability.

Oral micronised progesterone is a bioidentical with a strong safety profile and causes fewer side effects. It can cause drowsiness which is why it is best taken at night.

The benefits of taking progesterone are:

- Reduces hot flashes and night sweats
- Can improve mood
- Reduces the risk of osteoporosis

Can progesterone be taken without estrogen?

Yes! In fact, some experts believe that it should be taken alone during perimenopause, but this is not a standard protocol. Some doctors are open to their patients trying progesterone on its own to see if symptoms improve. If you want to know more about this, check out the Centre for Menstrual Cycle and Ovulation Research ([CEMCOR](#)) for more information on this.

Why are there different forms of estrogen?

Estrogen can be taken in pill form, patches, gels, creams, or rings. The pill form poses some risks since it passes through the liver and it's associated with higher risk of stroke. Transdermal delivery systems are considered safer and whether you take a gel or patch will depend on what your doctor deems most appropriate for you based on your health risks and lifestyle. For instance, the patch could be very convenient for someone who tends to forget to apply the gel daily but a patch would not be given to someone who might be swimming several times per week. Some estrogen creams are meant to be applied to the vagina for dryness, itchiness, atrophy and/or UTIs; they have a local effect and not a systemic effect.