



## HRT - Types and doses

### Why are there different types of HRT?

Levels of estrogen in your body reduce during the perimenopause and menopause and once you have gone through the menopause, your levels of estrogen will remain low forever, if you do not take HRT.

The other hormone that many women find beneficial to replace is testosterone - which is actually produced by your ovaries in greater quantities than estrogen, before the menopause.

Working out the right dose and type of HRT necessitates a very individualised approach. Women often find that it is only when they are given the right balance of hormones for them, that their symptoms really start to improve.

It is useful to remember that as well as improving symptoms, HRT lowers your future risk of developing diseases such as osteoporosis, heart disease, type II diabetes and dementia.

### What is the difference between estrogen tablets, patches, gels or sprays?

There are different ways to take estrogen. In the past, estrogen was only given as a tablet which was derived from pregnant horses' urine. Since then, there has been a change in the way HRT is manufactured; the majority of HRT we now prescribe is derived from yams, the root vegetable.

Estrogen is usually given initially as a patch or gel, as this is absorbed directly through your skin into your bloodstream. Recently, estrogen has also become available in a spray form, which is also absorbed directly through the skin. This means that it bypasses your liver and causes less side effects. In addition, your liver produces clotting factors, which means that if a tablet of estrogen is taken, there is a small increased risk of a blood clot occurring. This risk of clot is not present however, in women who take estrogen through the skin as a patch, gel or spray.

In addition, transdermal estrogen (taken through the skin) can be used by women with migraines, whereas estrogen in tablet form should not be taken by these women.

### What is the difference between the various progestogens?

If you still have your uterus (womb) then you will also need to take a type of progestogen to protect the lining of your womb. This is because taking estrogen alone can increase the thickness of the lining of your womb and cause a slight risk of the cells becoming cancerous. Taking progesterone reduces this thickening effect - and therefore the risk. The progestogen is usually given as a tablet, but it can also be given in the form of a coil inserted into your womb (uterus).

The safest type of progestogen is an oral capsule called micronised progesterone or Utrogestan®. This is a body identical type of progesterone, as it has the same molecular structure as progestogen naturally produced in the body, and it is also derived from yams. Micronised progesterone is associated with a lower risk of breast cancer for women taking this type, compared to women taking the synthetic types of progestogens. It can be taken as two capsules together, for two out of four weeks in women who are still having periods, or taken as one capsule, each evening, for a period-free HRT regime.

If women are having side effects with micronised progesterone, they can use it at half the dose and insert it vaginally. Although it is not licensed to be used in this way, it can be very effective for many women; research

has shown this dose provides adequate protection of the lining of the womb.

The other way to take a progestogen is to use a coil. The Mirena® IUS provides the necessary progestogen needed to combat thickening of the womb lining, and it is also a very effective method of contraception for women who require this. The Mirena coil can be used as the progestogen component of HRT for five years and then can be replaced after this time.

There are other types of progestogens which are synthetic and not body identical. Combination patches containing progestogen and estrogen are also available.

Synthetic progestogens are more likely to be associated with side effects such as breast tenderness, bloating and mood swings. Often changing the type of progestogen can help to reduce side effects.

## Are hormone blood tests needed to choose the right type or dose of HRT?

A hormone blood test is not usually needed in most women to diagnose the perimenopause and menopause because the diagnosis is made from symptoms alone.

A testosterone blood test should be undertaken before testosterone replacement is started as it is useful to know what the baseline testosterone level is before starting treatment. Another useful blood test is to check the Sex Hormone Binding Globulin (SHBG) level. From the testosterone and SHBG levels, the 'Free Androgen Index' (FAI) can be calculated. These tests and the FAI should be repeated at regular intervals to ensure that the level remains within the female range and therefore the risk of side effects with testosterone are minimised.

When a woman is taking estrogen replacement in a patch, gel or spray form, it can be useful to test estradiol levels to see whether the woman is absorbing adequate amounts of estrogen into her body. If the level is low, it is an indication that a higher dose of estrogen might be required, or perhaps it needs to be taken in a different way.

## What should I do if my symptoms return when I am taking HRT?

Many women are taking the wrong dose or type of HRT and are therefore still experiencing menopausal symptoms. Some women find that simply changing from one type of preparation to another - for example, changing from a tablet to a patch - really improves their symptoms.

The 'right' amount of replacement hormones to reduce symptoms as much as possible is not the same from woman to woman. In the same way that diabetics need different amounts of insulin, or people with underactive thyroid glands need varying amounts of thyroxine, estrogen and testosterone requirements are unique to each woman. Younger women often need higher doses of estrogen than older women.

Different adhesives are used for the patches to stick to the skin; some women find that changing from one type of patch to a different brand improves their absorption of estrogen through the skin. If a patch is not sticking well or is crinkling, this suggests you will not absorb the estrogen properly - you need to either change the patch or change to a different form of estrogen such as a gel or spray instead.

## Can you vary the amount of estrogen you take throughout the month?

Many women who are perimenopausal notice that their symptoms worsen at certain times of the month. Typically, when estradiol levels naturally reduce around the time of your period, you can use additional pumps of gel at this time to reduce the exacerbation of symptoms.

## What is the maximum amount of HRT I can take?

Women commonly need to use higher doses of estrogen than the recommended licensed doses. If a woman is using a higher dose of patch or gel, their estradiol level is usually monitored closely to ensure they are receiving appropriate amounts.