

Understanding the  
**Menopause**  
and **HRT**

Dr Anne MacGregor

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**IMPORTANT**

This book is intended not as a substitute for personal medical advice but as a supplement to that advice for the patient who wishes to understand more about his or her condition.

Before taking any form of treatment  
**YOU SHOULD ALWAYS CONSULT YOUR MEDICAL PRACTITIONER.**

In particular (without limit) you should note that advances in medical science occur rapidly and some information about drugs and treatment contained in this booklet may very soon be out of date.

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## About the author

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## The menopause: what happens to your body?

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### What is the 'menopause'?

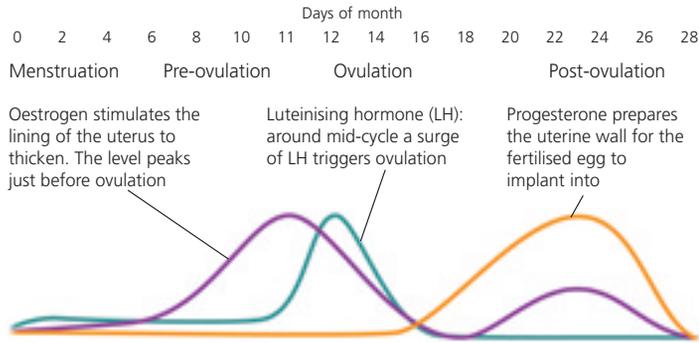
The word 'menopause' strictly means a woman's last menstrual period, which typically occurs around the age of 51, and defines the end of the fertile phase of a woman's life. The 'change of life' or 'climacteric' is the time when your body is adjusting before, during and after the menopause. There are hormonal changes and symptoms in the years leading up to, and beyond, your final menstrual period. It has been estimated that, by the age of 54 years, most women (80 per cent) have had their last menstrual period – they are then termed postmenopausal.

Some women experience a natural menopause before the age of 40. This is considered premature. Menopause can be induced prematurely by radiotherapy or chemotherapy used to treat some cancers, or following surgery to remove the ovaries. In such women, hot flushes and sweats can be particularly severe.

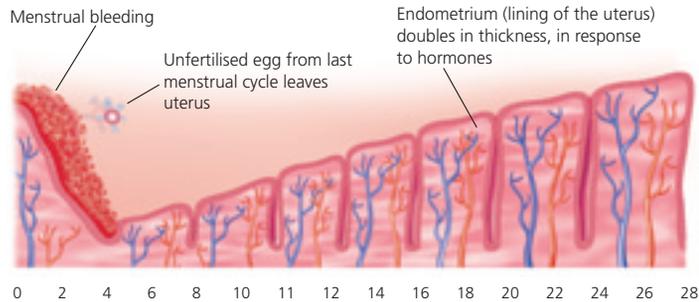
## The menstrual cycle

Every month between puberty and the menopause, a mature egg is released and the lining of the uterus becomes thicker, ready for a fertilised egg to implant. If the egg is not fertilised it passes out of the body during menstruation.

### 1. The principal changes in hormones during the menstrual cycle

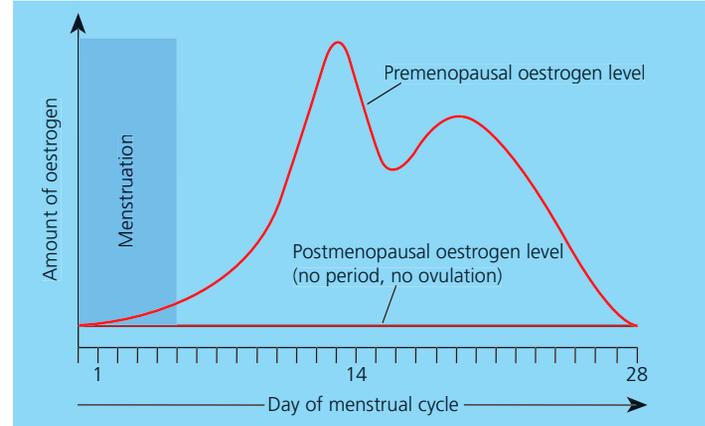


### 2. Changes in the lining of the uterus during the menstrual cycle

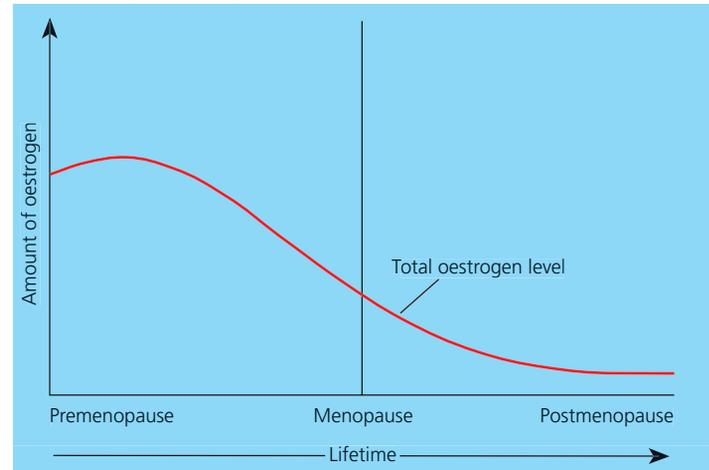


## The change in oestrogen levels over a lifetime

Until the menopause, women produce oestrogen in varying amounts over a 28-day cycle. However, after the menopause, oestrogen production falls to a low level and this increases the risk of bone fractures, strokes and heart disease.



Oestrogen levels gradually decline towards the menopause. After the menopause the ovaries cease functioning, oestrogen levels fall and periods stop.



Many women adjust to the changes without problems and some revel in their new-found freedom – free from the monthly ‘curse’ of periods, particularly if periods were painful or heavy, and free from the fear of unwanted pregnancy. However, not all women find the change of life easy and, although some may benefit from self-help treatments, others need medical support.

### **Hormonal changes**

From puberty to the menopause, women’s bodies follow hormonal cycles – the monthly periods. Each month the levels of the female hormone, oestrogen, rise over the early part of the cycle, stimulating the growth of an egg, which is released from one of the two ovaries at mid-cycle. Following ovulation, another female hormone, progesterone, stimulates the lining of the uterus to thicken, ready for a possible pregnancy. If the egg is not fertilised by a sperm, it dies and the egg and uterus lining are shed as a period.

In the years leading up to the menopause, the ovaries become less efficient, resulting in irregular and often heavy periods. Eventually, they stop functioning, no further eggs are released and periods stop. At the same time, the monthly hormonal cycle becomes more erratic. Blood levels of oestrogen fluctuate – low levels give rise to hot flushes, night sweats and many other symptoms.

### **Symptoms of the menopause**

Most, but not all, symptoms of the menopause are directly related to fluctuating oestrogen levels. Possible solutions to relieve these symptoms are discussed in the chapter starting on page 14.

### **Irregular periods**

This is usually the first sign that signals the menopause. As the ovaries become erratic in their production of oestrogen and progesterone, so your menstrual cycle becomes irregular. At first your cycle typically shortens from its usual 28 days to between 21 and 25 days. Later on, it lengthens, with occasional skipped periods. Your period itself can change – sometimes it may be very heavy and last longer than usual, at other times it may be scanty and short. Fewer cycles result in the release of an egg and so you become less fertile. Sometimes an egg is spontaneously released following an apparent menopause, so you should use adequate contraception until a year or two after your final period.

### **Hot flushes and night sweats**

Hot flushes and night sweats are hallmark symptoms of the menopause, affecting about 75 per cent of women.

Flushes often start around the age of 47 or 48 and usually continue for three or four years. In the early stages of the menopause they may occur only in the week before menstruation, when oestrogen levels are naturally low. Eventually, oestrogen levels fluctuate sufficiently throughout the cycle so that flushes happen at any time. Flushes reach their peak during the first couple of years after the last menstrual period, and then ease over time.

In some women flushes start earlier; for some it happens in their late 30s or early 40s. Flushes can continue for 5 or 10 years; 25 per cent of women will have occasional flushes for more than 5 years. A Swedish study found that about 9 per cent of 72-year-old women have hot flushes.

## Symptoms of the menopause

There are many symptoms associated with the menopause, mainly caused by changes in the levels of oestrogen in the body. Fortunately, most women do not suffer from all the symptoms.

- Anxiety
- Changes to skin and hair
- Depression
- Disrupted sleep
- Dry vagina
- Fatigue
- Headaches
- Hot flushes and night sweats
- Irregular periods
- Irritability
- Joint and muscle pain
- Loss of interest in sex
- Painful intercourse
- Palpitations of the heart
- Poor concentration
- Poor memory
- Urinary problems

Many women can sense when a flush is about to start, often noticing a feeling of increasing pressure in the head and a faster pulse. Within a few minutes, the flush rapidly spreads across the shoulders and chest, rising up the neck and head. This often causes great discomfort and embarrassment. Flushes usually last a matter of seconds but can persist for 15 minutes or so, recurring several times during the day. You might also notice sweating or palpitations and feel weak or faint. Night sweats can be particularly severe, disrupting sleep – some women have to change their night-clothes and even their sheets because they wake drenched in sweat.

## Disrupted sleep

Symptoms such as night sweats are not the only reason for disrupted sleep. Such symptoms can also be a symptom of underlying anxiety or depression. Anxiety usually causes difficulty getting to sleep – you feel extremely tired but your mind keeps ticking over the events of the day or you worry about the future. Depression is more often associated with early morning waking – you get to sleep without too much trouble but wake in the early hours tossing and turning until it is time to get up.

As the hormonal changes of the menopause can aggravate underlying anxiety and depression, specific medical treatment for these conditions may be necessary. So, if sleepless nights continue, particularly if you have successfully controlled other symptoms of the 'change', you should seek help from your doctor.

## Headaches

Fluctuating hormone levels can trigger migraine and other headaches in susceptible women. During the 'change' women notice an increasing link between headaches and their monthly periods. Premenstrual symptoms, that is, occurring a week or two before a period, become more prominent at this time of life and both migraine and non-migraine headaches can worsen during the premenstrual week. Headaches usually improve when hormonal fluctuations settle after the menopause. If the headaches are troublesome, your doctor or a specialist headache clinic can advise on specific treatment.

## Joint and muscle pains

Aching wrists, knees and ankles, and lower back pain are common and may often be confused with arthritis.

### **Painful intercourse**

Oestrogen stimulates the production of mucus, which keeps the vagina and other sexual parts moist. After the menopause, lack of oestrogen means that less lubricating mucus is produced. The vagina becomes shorter, less elastic and dryer. As well as intercourse becoming more painful, these changes can result in itching and irritation. However, sexual excitement stimulates the production of lubricating fluids, so prolonged foreplay can help prevent painful intercourse.

### **Loss of libido**

Sexual desire frequently lessens with the menopause and it often takes longer to become aroused. Sexual desire is also affected by general well-being, emotional upsets and painful intercourse.

### **Urinary symptoms**

A sudden need to urinate (urge incontinence), even when you have just been to the toilet, is a common problem after the menopause; lack of oestrogen causes the tissues around the neck of the bladder to thin. Also the muscles that support the uterus and prevent the bladder from leaking become weaker.

Coughing and running typically provoke an embarrassing leak of urine (stress incontinence), which affects between 10 and 20 per cent of women over 60 and up to 40 per cent of women in their 80s. Stress incontinence also commonly affects women in their late 40s and throughout their 50s.

Recurring urine infections are also more common as the skin around the bladder becomes thinner and drier. Oestrogen deficiency changes the acidity of the vaginal secretions, resulting in fewer of the protective bacteria

being present that help to fight off infection before the menopause. A common sign of possible infection is burning or stinging when urinating.

### **Dry skin and hair**

Oestrogen keeps your skin moist and stimulates hair growth – hence the ‘bloom’ of pregnancy when oestrogen levels are very high. Without oestrogen your skin becomes dry, losing its suppleness so that wrinkles become more prominent. Hair growth slows but the rate of hair loss stays the same so your hair becomes thinner and less manageable.

### **Dry eyes**

As well as skin becoming drier after the menopause, many women notice that their eyes become persistently dry and itchy as fewer tears are produced.

### **Weight gain**

Women may put on weight because of reduced physical activity – perhaps just as a result of lifestyle changes but maybe because of joint problems. As we age our bodies burn up energy more slowly than when we were younger, which can also lead to weight gain if we don't either eat less or exercise more. Hormonal changes also play a role, because oestrogen is responsible for maintaining the female shape; after the menopause weight tends to settle more around the waist than the hips.

### **Emotional symptoms**

Poor sleep has a knock-on effect resulting in daytime tiredness, lethargy, difficulty concentrating and depression. These symptoms are often very distressing and make it

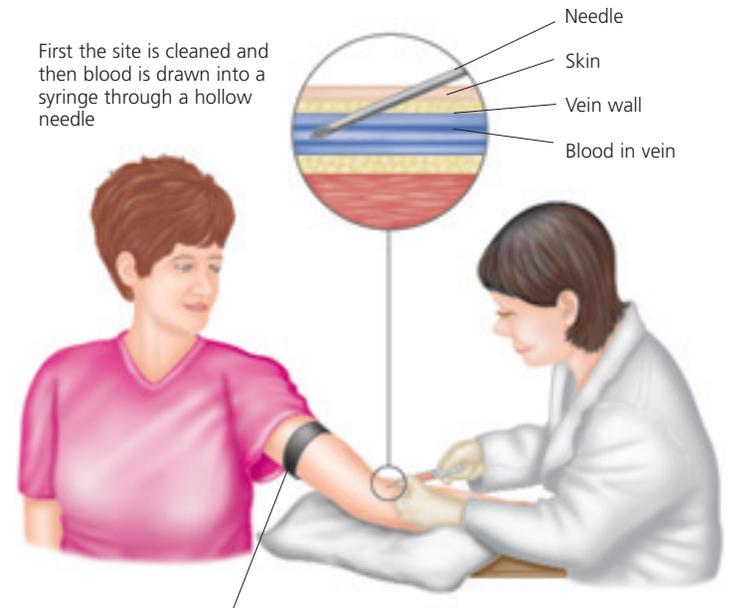
even harder to cope with daily demands. Finding ways to improve sleep, either by controlling the flushes or by treating depression, can help restore the balance.

### Non-hormonal symptoms

Depression and sexual problems around the menopause are not just the result of falling levels of oestrogen. The menopause marks a time in a woman's life that can be difficult for many reasons – it may coincide with children leaving home, impending retirement, marital difficulties, ill or dying parents. These changes take their own toll and may need professional support. Some women may benefit from professional support which is available through GPs.

### Diagnosing the 'change'

The symptoms of the 'change' are usually sufficient evidence to make the diagnosis, particularly for women in their late 40s or early 50s. If there is any uncertainty about the diagnosis, for example if a woman experiences an unusually early menopause, the diagnosis can be confirmed by a simple blood test to check the hormone levels. Unless a woman's periods have stopped completely, the blood tests are usually taken within the first week of the menstrual cycle, the first day of the cycle being the first day of bleeding. These tests check the levels of follicle-stimulating hormone (FSH) and luteinising hormone (LH), which are higher than usual if a woman is perimenopausal (close to the menopause). Sometimes a second test is taken about a week before the expected start of menstruation to measure the levels of progesterone. The presence of this hormone confirms that the woman has ovulated that cycle. As these blood tests give a result only for



A tourniquet may be applied to make the vein more prominent

The menopause can be confirmed by a simple blood test to check the hormone levels.

that particular menstrual cycle, and normal hormone surges can occasionally confuse the results, the results must be viewed in the context of all the symptoms – a single normal result does not exclude the menopause.

### Postmenopausal risks

The menopause has taken on much greater importance over recent years, particularly in western society, because, with a life expectancy of over 80 years (and rising), many women can expect to be postmenopausal for over one-third of their lives.

Although the symptoms of the menopause are not life threatening, the long-term effects of oestrogen deficiency can be. The major diseases of old age are heart disease, strokes, breast and bowel cancer, osteoporosis and fractures, and dementia. All of these are affected by oestrogen so women with a premature menopause are at particular risk. Although these conditions do not always result in death, they may lead to a significant reduction in quality of life, for both the individuals affected and their relatives.

### KEY POINTS

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- There are many symptoms of the 'change' and they vary from mild to severe
- Typical symptoms are irregular periods, hot flushes and night sweats
- Symptoms can also include mood changes, difficulty sleeping and depression
- Diagnosis of the menopause is usually based on the symptoms
- Most symptoms settle within a few years of periods stopping
- Women now live longer and the long-term effects of oestrogen deficiency are increasingly apparent; the risk of fractures, strokes and heart disease increases with each year after the menopause

# Helping yourself feel better

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## Menopausal symptoms

Simple measures are worth trying before complementary or prescription therapies are considered, particularly if the symptoms are relatively mild.

### Flushes and sweats

Keep cool – hot flushes can be triggered by a rise in temperature, eating hot spicy foods, or hot drinks such as tea or coffee. Anecdotally, women report that using a fan and drinking cold drinks can help. Wear natural fibres that allow air to circulate around the skin and layer thinner clothes rather than wearing one thick sweater. Use cotton sheets or duvet covers and sleep in a cool room with adequate ventilation.

### Exercise

Physically active women experience fewer and less severe flushes than sedentary women.

### Lose weight

A high body mass (being overweight) predisposes to more frequent and severe flushes.

### Stop smoking

The more a woman smokes, the more flushes she is likely to have.

### Relax

Slow, controlled breathing can reduce the severity of a flush when performed as soon as a flush begins.

### Disrupted sleep

The above strategies of exercise, weight loss and relaxation similarly apply to improving sleep. Avoid stimulating food and drink near bedtime, particularly alcohol – try a warm milky drink instead. Have a warm bath and read a book or watch TV until you feel sleepy, but beware of thrillers and other stimulating programmes! Keep the room cool with circulating fresh air. If you wake in the night and cannot go back to sleep, get up, make a drink and read for a while. If you feel tired during the day, take a 20-minute nap – longer than this will make it harder to sleep at night.

### Irregular periods

As periods become more irregular, they often also become heavier and more painful. Mild period problems can be helped by gentle exercise or heat but heavy, painful periods often require specific treatment. If simple painkillers don't help, visit the doctor for advice. As heavy periods can lead to anaemia, boost iron intake with iron-rich foods such as meat and spinach, or with iron supplements.