

Menopause: hormonal changes and the body

The menopause is a natural stage that people experience. Some trans men and non-binary people may also experience the menopause.

Symptoms and experiences can differ from person to person, but this article explores some of the changes that occur in the body due to fluctuating hormone levels. It also looks at ways to look after your body to help manage symptoms.

Weight gain

When you think of the menopause, you may not immediately associate it with gaining weight as a result. However, for many people, the arrival of the menopause coincides with an unwelcome increase in their waistline. There are many reasons why people may gain weight, including hormonal, physiological and social reasons.

As you approach the menopause, changes to your hormones can affect how your body stores and uses energy. Estrogen and progesterone decline, which can lead to lower metabolic rates and increased fat storage – especially around the midsection. Muscle mass also decreases, which means the body requires fewer calories than it did previously.

Another factor to consider is changes to your activity levels. If you're struggling with symptoms (poor sleep, low energy etc.) you might not feel like maintaining the exercise levels you had achieved previously, which again can lead to weight gain.

Bone strength and density

Losing bone is a natural part of aging, and we gradually start to lose bone density from around the age of 35. The [NHS](#) states

that women are more at risk of osteoporosis (a condition that weakens bones) than men - particularly if the menopause begins early (before the age of 45) or they've had their ovaries removed.

Oestrogen is responsible for forming some of our bone cells, and as you progress through the menopause your bone mineral density (the strength of your bones) weakens as oestrogen levels drop. This means you are more prone to fractures.

It's not always obvious that your bone strength is changing, and for most people, the first time they get a bone fracture is the first instance they realise a change in their bone strength.

Research published by The Journal of Clinical Endocrinology & Metabolism found that women [can lose up to 50% of their bone strength in the first 10 years after the menopause](#).

Heart health

Estrogen helps to keep the heart healthy by supporting the lining of the arteries, promoting healthy cholesterol levels, and by helping to keep the blood vessels flexible. When oestrogen levels decrease as a result of the menopause, the risk of heart disease and stroke increases.

A decline in oestrogen levels can also lead to:

- Increased body fat around the organs
- Increased cholesterol levels
- Stiffening or weakening of the blood vessels
- Increased risk of [metabolic syndrome](#)
- High blood glucose (sugar)
- Low levels of HDL ('good' cholesterol in the blood)
- High blood pressure



The early natural menopause (prior to 45 years of age) and the surgical removal of the ovaries can increase someone's risk of cardiovascular disease. In turn, those who experience natural menopause at a later age have a lower risk of cardiovascular disease and death.

Early menopause and heart disease

Around one in 100 people experience early menopause before the age of 40. It puts them at particularly high risk of premature heart and circulatory disease, as well as osteoporosis.

If you are younger than 45 when your periods stop, you may need tests to check if there is another reason behind it. Family history can play a part, but early menopause can also be associated with thyroid disease, viral infection and eating disorders. People are also at risk following surgical or treatment induced menopause, for example, if they are undergoing treatment for cancer that requires removal of the female organs.

Treatment for early menopause is particularly important. People in this category may be offered the option of taking hormone replacement therapy (HRT) or the combined contraceptive pill to reduce their risk of heart and circulatory disease and osteoporosis until they are at least 51 years old.

Looking after your body

Although people can experience a number of unpleasant symptoms during and post-menopause, there are ways to help minimise symptoms and boost your overall health and wellbeing. Below we've listed a few, but you can find further advice at [The Menopause Charity](#).

- **Regular physical activity:** This provides multiple benefits for your body, including supporting your heart health, mental wellbeing and helping you to maintain a healthy weight. It also helps to raise the level of your 'good' cholesterol. For example, aerobic exercises could include walking, jogging and swimming.

- **Strength building exercises:** Weight-bearing exercises can help to preserve bone mass, helping to prevent fractures. This could include walking, running and moderate weight training.
- **Nutrition and diet:** A healthy balanced diet can help to relieve symptoms of menopause. The British Nutrition Foundation recommends eating plenty of fruits, vegetables, high-fibre foods (such as wholegrains), dairy or dairy alternatives, a range of protein sources (especially beans, peas and lentils) and small amounts of unsaturated fats (such as olive or rapeseed oil). [Find further guidance here.](#)
- **Sleep:** Changes in the body during menopause may lead to poor quality sleep. Trying to maintain a regular sleep pattern and relaxation before bed can help. [The Sleep Foundation](#) offers further tips.
- **Stress reduction:** Stress can trigger symptoms related to the menopause, such as hot flushes, sleep problems, mood swings and digestive issues. Try to get into the habit of making time to relax. This includes time for hobbies and interests, as well as practices such as meditation and keeping a journal of your reflections. Regular physical activity will also help to reduce stress levels.
- **Talk to others:** Talking to others about how we feel can help to offload and remind us that we are not alone in our struggles. Nurturing your social connections also supports your overall health and wellbeing.
- **Things to avoid:** Avoid smoking, and don't drink more than 14 units of alcohol per week split across several days.

Further support

[The Menopause Charity](#) - Support and advice.

[NHS](#) - Guidance for managing menopause symptoms.

[Menopause Matters](#) - Information and support.

[NHS Inform](#) - Menopause and the workplace.

[Rock My Menopause](#) - Trans and the menopause.

Sources:

www.themenopausecharity.org/2022/04/19/living-well-through-your-perimenopause-and-menopause

www.hopkinsmedicine.org/health/conditions-and-diseases/staying-healthy-after-menopause

www.nutrition.org.uk

www.bmj.com/content/354/bmj.i5004