



## Menopause and Diabetes



In the last 2 decades, prevalence of type 2 diabetes mellitus has tripled in adults aged 20–79 years, affecting more than 25% of people above the age of 50 and especially women after menopause. Perimenopause and menopause are a time of profound hormone changes and these impact various organs and tissues in a woman's body including her metabolism.

While every individual's menopause experience and symptoms are unique studies have found that women with peri- or post-menopausal status have a higher risk of developing diabetes. Early menopause before the age of 45, particularly premature menopause before the age of 40, is a risk factor for type 2 diabetes, and the risk is higher for some ethnic groups too.

Menopausal transition does not cause diabetes, but the hormone changes may lead to slower metabolism, weight gain and insulin resistance, which can cause changes to blood vessels and heart health and increase the risk of type 2 diabetes. Other risk factors include your age, body mass index (BMI), ethnicity, and diet/level of physical activity will have independent influence on risk of developing diabetes.



### What if I already have diabetes?

INSULIN RESISTANCE

Fluctuations in the levels of oestrogen and progesterone can alter the cellular response to insulin which can cause unexpected spikes and falls in blood sugar levels making it harder to keep diabetes well controlled during menopausal transition. Increased stress from vasomotor symptoms, sleep difficulties and emotional/memory symptoms can raise cortisol levels which also do not help with blood sugar control.

Slowing of metabolism, fat redistribution around the middle of the body and weight gain are common at the time of menopause transition and these increase the need for insulin or oral diabetes medication due to insulin resistance.

Menopause causes several changes to the genitourinary tract and can make women more prone to urinary tract and vaginal infections if diabetes is not well controlled.

### What can help?

There are several steps that can help minimise the impact of menopause on diabetes.

**Key lifestyle factors include:**

- Eating a healthy balanced diet (avoiding high calorific and high carbohydrate foods)
- Avoiding smoking
- Reducing alcohol intake, and,
- Keeping physically active.

Weight management is vital using a combination of diet intervention, regular exercise, and psychological support/motivation strategies.

A calcium rich diet, adequate vitamin D from being outdoors or vitamin D supplements (speak to your doctor about testing your vitamin D level), and weight bearing exercises will help with maintaining a good bone density.

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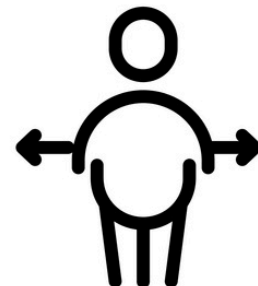


## What can help? (continued)




Testing blood sugar levels regularly could help with tracking the fluctuations and identify their relation to menopausal symptoms or other stressors. Depending on the blood sugar readings, a higher dosage of diabetes medications or the addition of a new medication may be needed for some women.

Addressing menopausal symptoms is important and this could be through lifestyle changes, non-hormonal treatments, or hormone replacement therapy/menopause hormone therapy (HRT/MHT). Vaginal symptoms will need either moisturisers/lubricants or preferably vaginal oestrogen therapy.



## What does hormone therapy do?

HRT/MHT has a favourable effect on glucose homeostasis both in women without and with diabetes. HRT/MHT appears to reduce the diagnosis of new-onset diabetes, and it can be beneficial in terms of glycaemic control when used for menopause symptom management in women with pre-existing diabetes.

Transdermal oestradiol and oral micronised progesterone are the most recommended components of a combined HRT/MHT as they are associated with favourable effects on cardiovascular health and glycaemic control. 

The choice, however, of HRT/MHT will be an individual one based on personal treatment preference, the severity of diabetes and medical history.

There are limited research data when it comes to interaction of diabetes and menopause. Larger clinical studies will be necessary to understand the impact of menopause on various complex hormone networks in the body that lead to metabolic changes at midlife and to evaluate the effects of HRT/MHT and other interventions for menopause on glucose homeostasis and insulin resistance in women with diabetes across various patient groups and ethnicities.

Useful resources:

Diabetes UK  
<https://www.diabetes.org.uk/>

NHS  
<https://www.nhs.uk/conditions/diabetes/>

British Menopause Society  
<https://thebms.org.uk/2025/07/diabetes-uk-supporting-women-with-diabetes-experiencing-menopause/>

Written and reviewed August 2025

