

**Menopause** is due to the loss of ovarian function, leading to low estrogen, resulting in no menstrual periods for 12 consecutive months.

**Perimenopause** often precedes menopause, and is a time of fluctuating hormones, cycle irregularity, and menopausal symptoms.



## Cause of Menopause

The ovaries become less responsive to a hormone in the brain called FSH (follicle-stimulating hormone). Before menopause, FSH stimulates the ovaries to make estrogen and follicles that eventually release an egg. As women age, the FSH level goes up because the ovaries are less responsive to it. Over time, ovaries stop responding to FSH and will no longer make follicles or contribute much estrogen.

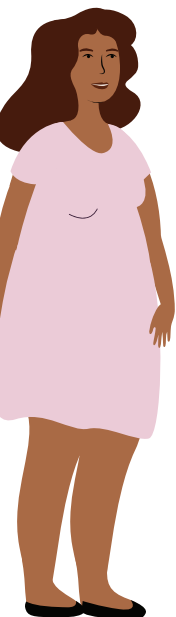
### A note about earlier menopause

Some people will enter menopause early due to genetics, surgery or treatment received for other conditions such as cancer. For example, some chemotherapy medications will induce menopause. However, some people will have an earlier menopause and we never know why.

**Early Menopause** is when menopause happens between 40 and 45 years old. This occurs for 5% of all women.

**Premature Ovarian Insufficiency (POI)** is when menopause happens before 40 years old. This occurs for 1% of all women.

## Symptoms of Menopause



- **Vasomotor Symptoms of Menopause (VMS)**  
Hot flashes, night sweats (sudden wave-like sensations of heat). More than 75% of women will suffer from them with 20% of women rating flushes as severe and causing significant impairment.
- **Genitourinary Symptoms of Menopause (GSM)**  
The collection of physical changes and symptoms including vulvovaginal dryness, burning, or irritation; painful intercourse; and urinary symptoms of urgency, painful urination, or recurrent urinary tract infection (UTI) associated with estrogen deficiency.
- **Lower Libido**  
Over half of postmenopausal women will experience sexual dysfunction. There can be many things that contribute to this concern.
- **Sleep Difficulties**  
Many people have challenges falling asleep, frequent awakenings, difficulty falling back asleep. If night sweats are causing nighttime arousal, there are treatment options available.
- **Changes in Mood and Cognition**  
Many people experience irritability and mood swings. If you have a history of postpartum depression, mood changes may be more pronounced at the time of menopause. Cognitive changes can include word-finding difficulty.
- **Weight Gain**  
Weight gain varies, but is typically 2.3kg (5lbs) and usually related to aging and activity changes. This weight is typically distributed centrally.

You may not need treatment for your menopause symptoms. If your symptoms are bothersome, **treatment should be individualized and will depend on your symptoms, past medical history and your family history.** There are good treatments for VMS and GSM. Suggestions can be made for other symptoms of menopause as well.

### References

1. Casper RF. Clinical manifestations and diagnosis of menopause. Up to Date. 2021 Sept.
2. Casper RF. Patient education: Menopause (beyond the basics). Up to Date. 2021 Apr.

This material is intended for use by Canadian residents only. It is solely intended for informational and educational purposes. The information presented in these handouts is not to be used as a substitute for medical advice, independent judgement, or proper clinical assessment by a physician. The context of each case and individual needs differ between patients and this material cannot be applied without consultation with a trained doctor. This information handout is not intended for the diagnosis of health concerns or to take the place of the care of a medical professional. This material reflects the information available at the time of preparation.

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