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A risk factor is anything that raises your chance of getting a disease such as cancer.

**higher risk.** These factors and how they affect endometrial cancer risk are covered in more detail below.

## Obesity

Obesity is a strong risk factor for endometrial cancer and linked to hormone changes, which are covered in more detail below. A woman's ovaries produce most of her estrogen before menopause. But fat tissue can change some other hormones (called *androgens*) into estrogens. This can impact estrogen levels, especially after menopause. Having more fat tissue can increase a woman's estrogen levels, which increases her endometrial cancer risk.

In comparison with women who stay at a healthy weight, endometrial cancer is twice as common in overweight women (BMI 25 to 29.9), and more than 3 times as common in obese women (BMI > 30). You can find your BMI using our [body mass index \(BMI\) calculator](#)<sup>1</sup>.

Gaining weight as you get older age and weight cycling (gaining and losing a lot of weight many times in your life) have also been linked to a higher risk of endometrial cancer after menopause.

## Hormone factors

A woman's hormone balance plays a part in the development of most endometrial cancers. Many of the risk factors for endometrial cancer affect estrogen levels. Before menopause, the ovaries are the major source of the 2 main types of female hormones -- estrogen and progesterone.

The balance between these hormones changes each month during a woman's

hormone therapy (or sometimes hormone replacement therapy). Estrogen is the major part of this treatment. Estrogen treatment can help reduce hot flashes, improve vaginal dryness, and help prevent the weakening of the bones (osteoporosis) that can occur with menopause.

But using estrogen alone (without progesterone) can lead to endometrial cancer in women who still have a uterus. To lower that risk, a progestin (progesterone or a drug like it) must be given along with estrogen. This is called combination hormone therapy.

Women who take progesterone along with estrogen to treat menopausal symptoms do not have an increased risk of endometrial cancer. Still, taking this combination increases a woman's chance of developing breast cancer and also increases the risk of serious blood clots.

If you are taking (or plan to take) hormones after menopause, it's important to discuss the possible risks (including cancer, blood clots, heart attacks, and stroke) with your doctor.

Like any other medicine, hormones should be used at the lowest dose needed and for the shortest possible time to control symptoms. As with any other medicine you take for a long time, you'll need to see your doctor regularly. Experts recommend yearly follow-up pelvic exams. If you have any abnormal bleeding or discharge from your vagina you should see a health care provider right away. (Do not wait until your next check-up).

For more information about the cancer risks linked to hormone treatment after menopause, see [Menopausal Hormone Therapy and Cancer Risk<sup>2</sup>](#).

## **Birth control pills**

Using birth control pills (oral contraceptives) lowers the risk of endometrial cancer. The risk is lowest in women who take the pill for a long time, and this protection lasts for at least 10 years after a woman stops taking the pill. But it's important to look at all of the risks and benefits when choosing a contraceptive method; endometrial cancer risk is only one factor to consider. It's a good idea to discuss the pros and cons of different types of birth control with your provider.

## **Total number of menstrual cycles**

Having more menstrual cycles during a woman's lifetime raises her risk of endometrial cancer. Starting menstrual periods (menarche) before age 12 and/or going through menopause later in life raises the risk. Starting periods early is less a risk factor for





disorder is caused by a defect in either the mismatch repair gene *MLH1* or the gene *MSH2*. But at least 5 other genes can cause HNPCC: *MLH3*, *MSH6*, *TGBR2*, *PMS1*, and *PMS2*. An abnormal copy of any one of these genes reduces the body's ability to repair damage to its DNA or control cell growth. This results in a very high risk of colon cancer, as well as a high risk of endometrial cancer. Women with this syndrome have a up to a 70% risk of developing endometrial cancer at some point. (The risk for women in general is about 3%.) The risk of ovarian cancer is also increased. General information about inherited cancer syndromes can be found in [Family Cancer Syndromes](#)<sup>6</sup>.

Some families have a higher rate of only endometrial cancer. These families may have a different genetic disorder that hasn't been found yet.

## Breast or ovarian cancer

Women who have had [breast cancer](#)<sup>7</sup> or [ovarian cancer](#)<sup>8</sup> may have an increased risk of endometrial cancer, too. Some of the dietary, hormone, and reproductive risk factors for breast and ovarian cancer also increase endometrial cancer risk.

## Endometrial hyperplasia

Endometrial hyperplasia is an increased growth of the endometrium. Mil9u0.627pnceej 0 g 0 0 0 rg ( )



- [cancer-risk/body-mass-index-bmi-calculator.html](#)
2. [www.cancer.org/cancer/risk-prevention/medical-treatments/menopausal-hormone-replacement-therapy-and-cancer-risk.html](http://www.cancer.org/cancer/risk-prevention/medical-treatments/menopausal-hormone-replacement-therapy-and-cancer-risk.html)
  3. [www.cancer.org/cancer/types/breast-cancer.html](http://www.cancer.org/cancer/types/breast-cancer.html)
  4. [www.cancer.org/cancer/risk-prevention/diet-physical-activity/acs-guidelines-nutrition-physical-activity-cancer-prevention.html](http://www.cancer.org/cancer/risk-prevention/diet-physical-activity/acs-guidelines-nutrition-physical-activity-cancer-prevention.html)
  5. [www.cancer.org/cancer/types/colon-rectal-cancer.html](http://www.cancer.org/cancer/types/colon-rectal-cancer.html)
  6. [www.cancer.org/cancer/risk-prevention/genetics/family-cancer-syndromes.html](http://www.cancer.org/cancer/risk-prevention/genetics/family-cancer-syndromes.html)
  7. [www.cancer.org/cancer/types/breast-cancer.html](http://www.cancer.org/cancer/types/breast-cancer.html)
  8. [www.cancer.org/cancer/types/ovarian-cancer.html](http://www.cancer.org/cancer/types/ovarian-cancer.html)
  9. [www.cancer.org/cancer/survivorship/long-term-health-concerns/second-cancers-in-adults.html](http://www.cancer.org/cancer/survivorship/long-term-health-concerns/second-cancers-in-adults.html)
  10. [www.cancer.org/cancer/types/endometrial-cancer/references.html](http://www.cancer.org/cancer/types/endometrial-cancer/references.html)

## References

American Society of Clinical Oncology. Uterine Cancer: Risk Factors and Prevention. 6/2017. Accessed at [www.cancer.net/cancer-types/uterine-cancer/risk-factors-and-prevention](http://www.cancer.net/cancer-types/uterine-cancer/risk-factors-and-prevention) on January 31, 2019.

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National Cancer Institute. Endometrial Cancer Treatment (PDQ®)—Patient Version. April 26, 2018. Accessed at [www.cancer.gov/types/uterine/patient/endometrial-treatment-pdq](http://www.cancer.gov/types/uterine/patient/endometrial-treatment-pdq) on January 31, 2019.

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umbrella review of the literature. *Int J Cancer*. 2018 Nov 2.

[See all references for Endometrial Cancer](#)

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## What Causes Endometrial Cancer?

We don't yet know exactly what causes most cases of endometrial cancer, but we do know there are risk factors, like obesity and hormone imbalance, that are strongly linked to this cancer.

We know that most endometrial cancer cells have estrogen and/or progesterone receptors on their surfaces. Somehow, interaction of these receptors and these hormones leads to increased growth of the endometrium. This increased growth can become more and more abnormal until it develops into a cancer.

As noted in the [risk factors section](#), many of the known endometrial cancer risk factors affect the balance between estrogen and progesterone in the body.

Scientists are learning more about changes in the DNA of certain genes that occur when normal endometrial cells become cancer. Some of these are discussed in [What's New in Endometrial Cancer Research?](#)<sup>1</sup>

### Hyperlinks

1. [www.cancer.org/cancer/types/endometrial-cancer/about/research.html](http://www.cancer.org/cancer/types/endometrial-cancer/about/research.html)
2. [www.cancer.org/cancer/types/endometrial-cancer/references.html](http://www.cancer.org/cancer/types/endometrial-cancer/references.html)

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American Society of Clinical Oncology. Uterine Cancer: Latest Research. 1/2019.

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[See all references for Endometrial Cancer](#)

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## Can Endometrial Cancer Be Prevented?

- [Get to and stay at a healthy weight](#)
- [Be physically active](#)
- [Discuss pros and cons of hormone therapy with your doctor](#)
- [Get treated for endometrial problems](#)
- [Talk to your doctor if you have HNPCC](#)

There's no sure way to prevent endometrial cancer. But there are things you can do that may help lower your risk of developing this disease. They're based on changing your risk factors whenever possible.

### Get to and stay at a healthy weight

Women who are overweight or obese are up to 3 times more likely to get endometrial cancer compared with women at a healthy weight. [Getting to and staying at a healthy weight<sup>1</sup>](#) is one way to lower the risk of this cancer.

### Be physically active

Studies have linked higher levels of physical activity to lower risks of endometrial

cancer, so getting regular physical activity (exercise) may also be a way to help lower endometrial cancer risk. An active lifestyle can help you stay at a healthy weight, as well as lower the risk of high blood pressure and diabetes (another risk factor for endometrial cancer).

## Discuss pros and cons of hormone therapy with your doctor

Estrogen to treat the symptoms of menopause is available in many different forms like pills, skin patches, shots, creams, and vaginal rings. If you're thinking about using estrogen for menopausal symptoms, ask your doctor about how it will affect your risk of endometrial cancer. Progestins (progesterone-like drugs) can reduce the risk of endometrial cancer in women taking estrogen therapy, but this combination increases the risk of breast cancer. If you still have your uterus and are taking estrogen therapy, be sure to discuss this issue with your doctor.

## Get treated for endometrial problems

Getting proper treatment of pre-cancer disorders of the endometrium is another way to lower the risk of endometrial cancer. Most endometrial cancers develop over a period of years. Many are known to come after, and possibly start, from less serious changes in the endometrium called *endometrial hyperplasia*. (See [Endometrial Cancer Risk Factors](#) for more on this.)

Some cases of hyperplasia go away without treatment, but sometimes it needs to be treated with hormones or even surgery. Treatment with progestins (see [Hormone Therapy for Endometrial Cancer](#)<sup>2</sup>) and a dilation and curettage (D&C) or hysterectomy (removing the uterus) can prevent hyperplasia from becoming cancer. (D&C is described in [Tests for Endometrial Cancer](#)<sup>3</sup>.)

Abnormal vaginal bleeding is the most common [symptom of endometrial pre-cancers and cancers](#)<sup>4</sup>. If you have unusual bleeding, see a health care provider and have it checked right away.

## Talk to your doctor if you have HNPCC

Women with [hereditary nonpolyposis colon cancer](#)<sup>5</sup> (HNPCC or Lynch syndrome) have a very high risk of endometrial cancer. Most experts recommend that a woman with HNPCC have her uterus, ovaries, and fallopian tubes removed (a hysterectomy and bilateral salpingo-oophorectomy) after she's finished having children to prevent endometrial cancer.

## Hyperlinks

1. [www.cancer.org/cancer/risk-prevention/diet-physical-activity.html](http://www.cancer.org/cancer/risk-prevention/diet-physical-activity.html)
  2. [www.cancer.org/cancer/types/endometrial-cancer/treating/hormone-therapy.html](http://www.cancer.org/cancer/types/endometrial-cancer/treating/hormone-therapy.html)
  3. [www.cancer.org/cancer/types/endometrial-cancer/detection-diagnosis-staging/how-diagnosed.html](http://www.cancer.org/cancer/types/endometrial-cancer/detection-diagnosis-staging/how-diagnosed.html)
  4. [www.cancer.org/cancer/types/endometrial-cancer/detection-diagnosis-staging/signs-and-symptoms.html](http://www.cancer.org/cancer/types/endometrial-cancer/detection-diagnosis-staging/signs-and-symptoms.html)
  5. [www.cancer.org/cancer/risk-prevention/genetics/family-cancer-syndromes.html](http://www.cancer.org/cancer/risk-prevention/genetics/family-cancer-syndromes.html)
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