

Managing your ovarian cancer risk: Lifestyle factors

If you have been told by your doctor that you are at high risk of ovarian cancer, you are probably wondering if there is anything you can do to reduce your risk.

This information sheet tells you about lifestyle factors that may affect your risk. It is based on current scientific evidence. Other sheets in this series tell you about screening methods and prevention strategies.

This information is for women who are at high risk because they have:

- a strong family history of breast and/or ovarian cancer, and/or
- a change in a gene that normally protects against breast/ovarian cancer (see: gene change).

What is a lifestyle risk factor?

These are things in your life that you may be able to change to reduce your risk.

How much do lifestyle factors affect my risk?

Unfortunately, we don't know as much as we would like to about these factors. It's likely that their effect on your risk is quite small. Much more research needs to be done before we can make reliable, **evidence-based** recommendations.

Which lifestyle factors could be important?

Diet

Obesity – particularly during a woman's teenage years – is **associated with** an increased risk of ovarian cancer.

No specific dietary factors can be singled out as being protective or a **risk factor** for ovarian cancer. However, a diet low in fat and high in fresh fruit and vegetables will help you to keep to your ideal body weight.

This type of diet may also help to protect against some other types of cancer.

Oral contraceptive pill ('the Pill')

In women with an **average risk** of ovarian cancer, the Pill reduces this risk by up to 50%. The more years a woman takes it, the greater the protection, and the protective effect lasts for up to 15 years after she stops taking the Pill.

In women with a **high risk** of ovarian cancer, some – but not all – research has shown that the Pill is associated with a decreased risk of ovarian cancer. Taking the Pill to try to prevent cancer needs to be weighed up against the uncertainty about the Pill and its effect on increasing breast cancer risk.

If you are planning to have your ovaries removed at around 40 years to prevent cancer, taking the Pill will not add to the benefit of risk reduction from the surgery.

Tubal ligation

Tubal ligation seals the **Fallopian tubes** so sperm can't pass up the tube to fertilise an egg. This results in infertility, so a woman can no longer have a child.

Some research suggests this procedure may reduce the risk of ovarian cancer by up to 35% in women at risk. It is not fully understood why the risk decreases. The risk reduction is not as great as removing the ovaries but it can be a useful procedure for those women not yet ready to have their ovaries removed.

Childbearing and breastfeeding

Women who have had at least one child are less likely to develop ovarian cancer than women who have never had a full-term pregnancy.

Studies have also shown that women who breastfeed are less likely to develop ovarian cancer.

Fertility drugs

There is no consistent evidence to show that fertility drugs either increase or reduce the risk of ovarian cancer.

Hormone replacement therapy (HRT)

Hormone replacement therapy is used to reduce **menopause** symptoms. Some studies have suggested that combined HRT (which contains **oestrogen** and **progesterone**) is associated with a higher risk of ovarian cancer. This seems to be especially true of women who have used HRT for 10 years or more.

However, the risk may depend on whether the HRT contains both oestrogen and progesterone, or whether it contains oestrogen only. No studies have looked at this in women who are already at high risk because of an inherited **gene change**.

Talc use

The use of talcum powder in the genital region has been suggested as a risk factor for ovarian cancer. However, scientific studies have not shown this. Therefore the relationship between talc use and risk of ovarian cancer remains unclear.

What that word means

associated with This expression is used in science to mean that there is scientific evidence to show that in the presence of one factor (for example, a change in a certain gene), another factor (for example, breast cancer) is more likely to occur.

average risk This means that someone's chance of developing a disease is no higher or lower than average. Also known as population risk.

evidence based Information based on evidence found by accepted scientific methods (for example in randomised clinical trials) or evaluated according to accepted scientific methods by respected authorities.

Fallopian tubes The tubes that carry the ova (eggs) from the ovary to the uterus. Each woman has two Fallopian tubes, one from each ovary.

family history A careful assessment by a Family Cancer Centre of cancer occurrences in a family.

gene change A change somewhere in a gene. A change may be inherited or be caused by an error while a cell is reproducing itself, by factors such as some chemicals or viruses, or by events that science is yet to discover. A change in a gene may lead to disease such as cancer. However, people with a change in a gene that may predispose to cancer don't always get cancer. Also known as a gene error or gene mutation.

high risk This means that someone's chance of developing a disease in the future is higher than average, due to a family history of the disease and/or a change in a gene known to predispose to that disease. People assessed as at high risk are advised to consider strategies that could reduce their risk.

hormone replacement therapy (HRT) Drug therapy that supplies the body with hormones which it is no longer able to produce; it is used to relieve symptoms of menopause.

menopause The time in a woman's life when the ovaries stop producing eggs and monthly periods stop. The woman is no longer able to conceive children. Menopause can also be caused by the removal of the ovaries and sometimes chemotherapy.

oestrogen One of several hormones that control female reproductive development. Oestrogen is mainly made in the ovaries.

ovaries Female sex organs that secrete important hormones and contain the ova, which are eggs released at ovulation.

progesterone One of several hormones that control female reproductive development. Progesterone is mainly made in the ovaries.

risk factor Something that causes someone to have a greater chance of developing a disease. Risk factors for cancer include exposure to harmful substances, such as cigarette smoke, and inheriting a changed gene that predisposes to a cancer.

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