

What is estrogen-based hormone therapy?

Estrogenizing hormone therapy is medicine that can be used as part of your gender transition process. There are two medicines that you might be given.

- **Estrogen** is the sex hormone that causes the development of feminine characteristics. It may be given as a pill that you put under your tongue, as a shot, or as a cream or patch you put on your skin.
- **Testosterone** is the sex hormone that causes the development of masculine characteristics. You may be given medicines called anti-androgens that can block and lower the amount of testosterone made by your body. The most common anti-androgen is called spironolactone. This makes estrogen work better. It comes as a pill.

Before taking estrogen-based hormone therapy, you need to know the most common benefits, risks, side effects, and other choices you have. We are happy to answer any questions you have.

What are the benefits?

Estrogen-based hormone therapy will change your body in the following ways:

- You will probably develop breasts.
- Your body hair, beard, and moustache will become less noticeable and will grow more slowly. But it won't stop completely, even if you take the medicines for years.
- You will probably have less fat on your belly and more on your butt, hips, and thighs.
- Your skin may become softer.

What are the risks?

Estrogen can:

- Harm the liver
- Increase the amount of fat and/or cholesterol in the blood
- Increase the risk of heart disease
- Increase the risk of blood clots in the legs, lungs, or brain (stroke)
- Increase blood pressure
- Increase the risk of diabetes (sugar)
- Increase the risk of gallbladder problems
- Cause migraine headaches
- Cause pituitary tumors (tumor of small gland in the brain which makes prolactin)

Spironolactone can cause high amounts of potassium (an important mineral in the body) in the blood, which can cause changes in your heartbeat that may be life-threatening.

These risks are rare. There may be long-term risks that we don't know about.

The risks of estrogen may be higher for people who:

- Smoke
- Are overweight
- Are older than 40
- Have a history of blood clots
- Have a history of high blood pressure
- Have a family history of breast cancer

What are the side effects?

Your testicles may shrink to half their size. Your body will make less testosterone. This can affect your sex life in different ways:

- You may feel less sexual.
- You may not be able to get erect for vaginal or anal sex.
- You probably won't have as much semen when you ejaculate.
- You may be unable to cause a pregnancy.

You may lose muscle and strength in your body. You may notice mood changes.

You might have a milky liquid come from your nipples. If this happens it is important to tell your doctor or nurse so they can check it for you.

Besides estrogen-based hormone therapy, what are my other choices?

You could do nothing. Other ways to feminize are having surgery and using cosmetic products. If you are interested in other options, talk with your doctor or nurse.

You can choose to stop taking estrogen-based hormone therapy at any time. If you decide to do that, talk to your doctor or nurse.

What else do I need to know?**How long does it take to work?**

Most changes start within 2 to 3 months. Some of the changes can take 2 to 3 years. No one can tell how fast — or how much — change will happen.

How long do I need to take the medicines?

Some of the medicines may need to be taken forever to keep some of the changes in your body. The following changes are usually not permanent — they will probably go away if you stop taking the medicines:

- Changes to your body hair
- Changes to your body fat
- Changes to your skin

If you lost the hair at the front or top of your head (male pattern baldness), it may slow down, but will probably not stop completely. Hair that you lose will probably not grow back.

If you grow breasts, they will stay, even if you stop taking estrogen.

If you have surgery to remove your testicles, you can stop taking spironolactone.

Can I get someone pregnant?

No one can tell you for sure if you'll be able to cause a pregnancy after taking feminizing hormone therapy. You could cause a pregnancy or you may never be able to, even if you stop the medicines.

If you have sex with a person who can get pregnant, you need to use some kind of birth control to prevent pregnancy, just in case.

Stopping estrogen and spironolactone may result in an increase in sperm. If you think you may want to cause a pregnancy in the future, you should talk to your doctor or nurse about storing your sperm before you start the medicines.

Your health is important to us. If you have any questions or concerns, please call us. We are happy to help you.

Signature of Patient

Date

Signature person authorized to sign for patient (when required)

Date

Relationship to Patient: ☐ parent ☐ legal guardian ☐ other

I witness that the patient received this information, said it was read and understood, and there was an opportunity to ask questions.

Signature of Witness

Date