People that are born with a male body can take hormones and medications that give them a more feminine appearance. Here is a short overview of how these medications work.

**What’s Involved?**
There are a few different options for hormone therapy, depending on how much physical change you want. For people that want to look as feminine as possible, we usually prescribe both estrogen (in pill, patch, or injections form) and one or two androgen “antagonists” (also called anti-androgens.) Androgen antagonists block the effects of testosterone to make estrogen more effective and can cause breast development, reduce body hair growth, and slow male pattern baldness. For people that want a more androgynous or gender-neutral appearance, androgen antagonists can be taken by themselves.

**What Changes Can You Expect?**
Feminizing hormone therapy causes a whole bunch of different emotional and physical changes – you might be really excited about some of them and you might not like others. Also, not everyone will have the same changes. A lot depends on your family background, ethnicity, lifestyle, and other factors. While there is no way to pick and choose how your body will change on hormone therapy, there is a lot you can do in terms of diet, exercise, and herbal support to take good care of your body and lessen any unwanted side effects. Below are common changes seen with feminizing hormone therapy when both estrogen and anti-androgens are taken.

**Skin**
Probably one of the first things you will notice changing is your skin. Your skin will start to become softer and less oily within the first several weeks of hormone use. Your skin may feel more sensitive to pain, temperature, and other physical sensations. Also, within the first few weeks, you will start sweating less and your body odor will start smelling different.

**Hair**
Hormones don’t totally stop facial and body hair growth, but over the first few years your hair will begin to grow in thinner, softer, and more slowly. Options for hair removal range from inexpensive (frequent shaving with a good razor) to very expensive (electrolysis and laser treatments). If you have hair thinning or male pattern baldness, hormones will slow or stop the balding, but your hair will not regrow in spots that are already bald.

**Body Shape**
Changes in where you body stores fat will begin in the first few months on hormones and increase over time. Storing more fat on your hips, thighs, bottom, lower belly, and chest will give you a softer shape. Changes in body fat storage will also make your face look different. This happens more slowly, over one or two year. Eventually your face will have a more full, soft look.

**Breasts**
Shortly after starting hormone therapy you may begin to develop breast “buds” beneath your nipples. These buds are an early stage of female breast development and they may be tender or uneven at first. Both the tenderness and the unevenness should even out within a few months. Over time, your breasts and nipples will slowly grow and change. There is a lot of variation when it comes to breast size and shape after several years on hormones. Transgender women tend to have smaller breasts than the average cisgender woman – usually an A cup or small B cup at most. If one breast remains slightly larger than the other, don’t worry – that’s normal for all people who have breasts! Weight gain may bring more fat into the breasts for a fuller appearance, and breast augmentation is also an option although it is expensive.
**Physical Strength**
You will start to lose muscle definition within the first few months of hormone therapy, which will give your body a softer shape. As you begin to lose your muscle mass, you will notice you have less upper body strength.

**Emotions**
Every person responds differently to starting hormones, but all you need to do is think back to puberty to remember how rough big hormonal changes can be. Since this change is a welcome one which you have some control over, you probably won’t feel exactly like a teenager all over again. But you may feel a lot of emotions, and you may notice some of your interests and ways of interacting with others begin to change. Remember that it’s never a bad idea to get the support of a therapist when major changes are going on in your life even if they are changes you have worked hard to make happen.

**Sexual Function**
Feminizing hormones will cause many changes to the penis, testicles, and sex drive. Over time, your testicles will shrink to half of their original size and will feel softer to the touch. You will probably notice less random and morning erections and you will likely notice you have a lower sex drive. When you do have an erection, your penis will feel less firm and the erection won’t last as long. That can sometimes make it seem difficult to penetrate your sex partner(s). You will still have a lot sensation in your penis and scrotum, but it will probably become more difficult to reach orgasm. When you do have an orgasm, little or no ejaculate will come out and your orgasms may feel different or more expansive than before.

Keep in mind that these changes do not mean that you can’t have a satisfying sex life! You are opening up a whole new world of sensation in your body. It can be fun to explore different ways of being sexual, different ways of reaching orgasm, and just get a feel for what is going to work for you. You can do this with your sexual partner(s) and also by yourself – masturbation can be very helpful during this time of change.

**Fertility**
It is important for you to know that the changes to your testicles can make it hard or impossible for you have biological children. This infertility can be permanent. There is no way to know for sure if you will lose your fertility, so you should plan ahead with the assumption that you will. If you know that you will want to have children while on hormone therapy and are not interested in adopting or fostering, you could consider having sperm frozen before starting hormones. It’s a month-long process and it’s expensive but it does make sure you will be able to parent biological children in the future. On the other hand, even though you have to take the likelihood of infertility seriously, you can’t rely on it for birth control if you do not want children. If you are having sex with someone who is capable of getting pregnant you should use birth control any time the two of you are not trying to have a baby.

**How Might it Impact Your Health?**
Estrogen has a big impact on cardiovascular health. Being on estrogen increases your risk of high blood pressure, liver problems, deep vein thrombosis, pulmonary embolism, and gall stones. Deep vein thrombosis and pulmonary embolism are very serious and potentially fatal conditions involving blood clots. If you are a smoker or are over the age of 35, your risk of developing these conditions is higher. In order to protect your health while on hormone therapy, it is very important that you come to all of your follow up appointments and reduce or stop smoking. Hormone therapy may slightly reduce your risk for prostate cancer, and slightly increase your risk for breast cancer.

**What’s Permanent and What’s Not?**
Most of the physical changes experienced with hormone therapy will go away if you stop taking hormones, with a few exceptions. Breast growth is usually permanent and there has been no research on the long-term impacts of hormone therapy on fertility, so we do not know if your fertility will return to normal after getting off hormones. If you have had genital surgery that removes your testicles you will have to stay on hormones until you’re at least 50 years old, although you can take a very low dose.