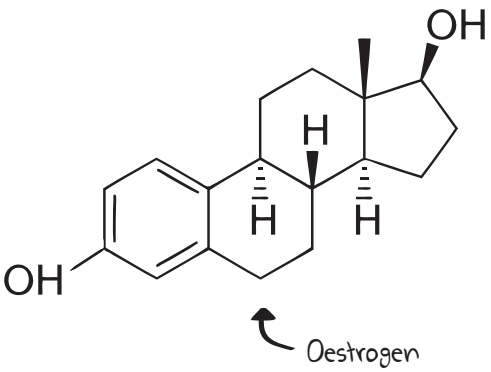
Feminising Hormone Information



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Beginning feminising hormone treatment can often be seen as a significant step forward in the lives of those on the feminine end of the transgender spectrum. It can have such a profoundly positive impact on the quality of life of an individual and give rise to an increased level of self-esteem and inspire further positive decision making towards a better future.
However the degree and rate of the physiological and psychological changes caused by feminising hormone treatment will vary for each person, there is also is no way of knowing exactly how your body will respond until treatment has commenced.

While the process of bringing one's body and mind closer together often has many positive effects, there are also a number of side-effects and risks involved with hormone treatment. By understanding what you can realistically expect, we hope that you will become better informed and more able to engage effectively with your health care providers to maximize the benefits and minimize the potential risks.
The Gender Centre provides this feminising hormone information fact sheet specifically for people in the feminine transgender range, those that are considering taking feminising hormones. We acknowledge that not all people will aspire to the same goals with their feminising process, and for this reason we have aimed at providing a fact sheet that reduces assumptions and labels in this respect.

This fact sheet may also be a helpful resource for partners, family, and friends who are wondering how hormones work and what they do. It is intended to not only inform those interested about feminising hormones, but hormones in general and how they physiologically and psychologically affect the human body.
Please remember however that the Gender Centre is not a medical centre and as such we do not provide medical documents and/or medical care and we cannot make referrals to any medical services; we do, however, provide information regarding health care service providers for you to access independently. We do not give recommendations regarding particular service providers.

INTRODUCTION TO HORMONES

A hormone is a chemical released by a cell or a gland in one part of the body that sends out messages that tell cells in another part of the body how to function. They provide instructions to other cells on when to grow, when to stop growing or die; when to activate one's immune system; they regulate one's metabolism including hunger, thirst, digestion, fat storage and burning, blood sugar and cholesterol levels; they prepare your body for new phases of life including puberty, parenthood and menopause; they control the reproductive cycle and prepare the body for mating, fighting, fleeing and other activity. Endocrine hormone molecules are produced in particular endocrine glands which include the thyroid, ovaries and testicles. Released into the bloodstream, hormones travel to cells in other parts of the body where they respond with cells that contain specific receptors.

SEX HORMONES

In many contexts, the two main classes of sex hormones, also known as sex steroids or gonadal steroids, are androgens and oestrogens, of which the most important human derivatives are testosterone and estradiol respectively. Other contexts include progestogen as a third class of sex steroids.
Generally speaking, androgens are considered "masculinising sex hormones", while oestrogens and progestogens are considered "feminising sex hormones". Different levels of both androgens and oestrogens exist in all people, regardless of their genitalia.
Sex Hormones regulate the development of sex characteristics including the sex organs that develop before we are born (genitals, ovaries/testicles, etc.) and also the secondary sex characteristics that typically develop at puberty (facial/body hair, bone growth, breast growth, voice changes, etc.).
Sex Steroids interact with specific androgen or oestrogen receptors and are produced primarily by the ovaries or testes and by adrenal glands.

Non-steroid hormones such as luteinizing hormone, follicle-stimulating hormone and gonadotropin-releasing hormone are usually not regarded as sex hormones, although they play an important sex-related role. There are also many synthetic sex steroids. Synthetic androgens are often referred to as anabolic steroids. Synthetic oestrogens and progestins are used in methods of hormonal contraception

PUBERTY

In understanding how feminising hormones work, and the changes that they can induce in those on the feminine end of the transgender spectrum, it is also important to understand some of the ways that our bodies may have already been affected by hormones during the puberty that we may have already experienced.

Puberty is the process of physical changes by which a child's body matures into an adult body capable of reproduction. Puberty is initiated by hormone signals from the brain to the gonads (the ovaries and testes). In response, the gonads produce a variety of hormones that stimulate the growth, function, or transformation of the brain, bones, muscle, blood, skin, hair, breasts, and sex organs. Before puberty, physical differences in children are almost entirely restricted to the genitalia. During puberty, major differences of size, shape, composition, and function develop in many body structures and systems. The most obvious of these are referred to as secondary sex characteristics.
Individuals that are on the feminine end of the transgender spectrum will undergo, are currently undergoing, or have already undergone an androgen-induced puberty that involved the androgen called testosterone.

Having already undergone some foetal masculinisation in utero, another rise in androgen levels begins between about ages six to eight and plateaus between the ages of twelve to fourteen. Although there is a wide range of typical ages, the physiological effects of androgen-induced puberty begin at approximately this point in time and continue for about four to five years.
Many developmental changes to the penis, testicles, foreskin and scrotum occur during puberty, however with the understanding that we are dealing with the feminising effects of hormone treatment, it is largely unnecessary to discuss these changes here.

Of the other changes that occur at puberty, some of them can be reversed or altered with the administration of feminine hormones while some others cannot. It is very important that a person at the feminine end of the transgender spectrum understand what can and cannot be achieved by undergoing feminising hormone treatment.
The high levels of testosterone experienced in the womb and again during an androgen-induced puberty lengthen the still developing bones creating our skeletal characteristics including our hands, fingers, feet and shoulder width, and by the end of puberty our long bones undergo what is known as "epiphyseal fusion", a process that stops our bones from growing and effectively sets the length of our arms and legs and our overall height.

The skull also presents features that are specifically attributable to the type of hormones that we have been exposed to during puberty. Those who have been exposed to androgens generally have a larger and squarer shaped skull than those exposed to oestrogens, with the ridge above the eyes tending to be more rounded and the forehead lower and more sloping. Cheekbones are also generally more pronounced and the lower jaw bone squarer.
However, of all the bones that make up the human skeleton, the pelvis shows the greatest hormonal induced differentiation, principally in relation to the requirements of childbirth. On average the pelvis of those that have been subjected to androgens is heavier and narrower than those that haven't.

Within a year of first appearing, pubic hairs become too many to count and soon densely fill the “pubic triangle”. The pubic hair then continues to spread to the thighs and upward towards the navel as part of the developing abdominal hair.

In the months and years following the appearance of pubic hair, other areas of skin that respond to androgens may develop androgenic hair. The usual sequence is: underarm (axillary) hair, perianal hair, upper lip hair, sideburn (preauricular) hair, periareolar hair, and the facial hair on the cheeks, upper neck and jaw line. As with most human biological processes, this specific order may vary among some individuals. Arm, leg, chest, abdominal, and back hair become heavier more gradually. There is a large range in amount of body hair and significant differences in timing and quantity of hair growth among different racial groups. Facial hair is often present in late adolescence, but may not appear until significantly later.

Under the influence of androgens, the voice box, or larynx also grows, sometimes prominently, causing the voice to drop and deepen about one octave, sometimes abruptly but rarely "overnight". Before puberty the larynx of all children is about equally as small.

OESTROGEN TREATMENT

Typically feminising hormone treatment involves oestrogen and another medication used to block testosterone called an anti-androgen. Sometimes progesterone is also used. Some of these chemicals work on the part of your brain that stimulates sex hormone production, some work on your testicles (which produce testosterone), and some work directly on the cells in your body that respond to sex hormones. In effect they trigger a “second puberty” in the body. The purpose of this “second puberty” is to cause the development of typically feminine secondary sex characteristics.
Maximum feminisation tends to occur if hormonal treatment is commenced before androgen-induced puberty begins.

However if an androgen-induced puberty has already occurred then feminising hormone treatment will have little effect on some of the already developed secondary sexual characteristics like deepening of voice, facial hair and skeletal structure, these cannot be reversed.
The effects of feminising hormone treatment will vary considerably between individuals, and can take several years to fully achieve. In order to maximise the physical effects and benefits, hormone treatment should be commenced as young as possible. The later in life that a feminising hormone therapy is started, the less effective it is likely be.

TYPES OF TREATMENT

Oestrogens

Oestradiol is the main type of oestrogen responsible for promoting "feminine" physical traits during feminising hormone treatment. It works directly on tissues in your body and also indirectly suppresses your testosterone. Oestradiol can be taken by pill (oral application), skin patch or gel (transdermal application), injection (intramuscular application), or implant (pellet inserted under skin), However doses between different types of preparation cannot be directly compared. It is also very common for doses to vary between individuals but doses are often higher than replacement doses for non-trans people.

Many different variations of estradiol exist as well as other types of oestrogens although the ones most commonly used are either micronized estradiol, estradiol acetate, estradiol valerate, estradiol cypionate, estradiol enanthate, conjugated estrogens, esterified estrogens, and ethinyl estradiol.

Progestogens

Progesterone is another steroid "feminine hormone". It is responsible for preparing the body for pregnancy and, if pregnancy occurs, maintaining it until birth. Pregnant women produce lots of progesterone which helps their bodies support the developing baby.

There seem to be mixed opinions about using Progestagens as part of a feminising hormone regimen. Many transgender health programs around the world don't use progestagens due to the lack of clear evidence that they are important in "feminization," and the known side effects (which include depression, weight gain, and changes to blood fats). Some doctors use progestagens to supplement oestrogen if oestrogen isn't working even at the maximum dose, or as a replacement for oestrogen if there are concerns about oestrogen's side effects or health risks, or because they believe that progestagens help with nipple development.

Progestogens include progesterone and progestins. There are oral, sublingual (under the tongue), suppository, gel, and injectable formulations available. Progestogens are involved in the full maturation of the breasts, particularly the mammary structures lobules, acini, and alveoli, however they are also associated with an increase risk in breast cancer, which is not seen with naturally produced progesterone.

Anti-androgens

Anti-androgen medications work by blocking the effects of testosterone. For example, they will help slow male-pattern baldness, reduce growth of facial hair, and stop spontaneous/morning erections. They are not needed if one has undergone a bilateral orchidectomy (removal of both testicles).

Anti-androgen drugs are often prescribed in addition to oestrogen, as the two have effects that complement each other. Taking anti-androgens reduces the amount of oestrogen you need to get the same effects, which minimizes the health risks associated with high doses of oestrogen. Anti-androgen drugs can be prescribed alone for those who want to reduce "masculine" characteristics for a more androgynous appearance, as it's less "feminizing" than oestrogen.

GnRH agonists

In adolescents, GnRH agonists can be used to suspend the advance of inappropriate pubertal changes for a period without inducing any changes in the gender-appropriate direction.
In the human brain, the hypothalamus releases gonadotropin-releasing hormone (GnRH) to stimulate the pituitary gland to produce luteinizing hormone (LH) and follicle-stimulating hormone (FSH) which in turn cause the gonads to produce sex steroids.

There is considerable debate over the earliest age, and for how long it is clinically safe to do this.

FEMINISING HORMONE EFFECTS

General

Both oestrogens and androgens are a necessity for healthy bones in all people.
The uppermost layer of skin becomes thinner and softer.
Body odour (skin, sweat, and urine) will become less "acrid" and more "sweet" and "musky."
Mood changes can occur including the development of depression.
Migraines can be made worse or unmasked by oestrogen therapy
Some people have noticed a feeling of self-contentment after starting H.R.T.

Hair

Current facial hair is only slightly affected (some reduction in density, coverage, and slower growth) caused by the effect of taking anti-androgens. Those who are less than a decade past puberty and/or whose ethnicity generally lacks a significant amount of facial hair will have better results with anti-androgens. If one is still in their teens or early twenties, there will be some prevention of new facial hairs from developing.

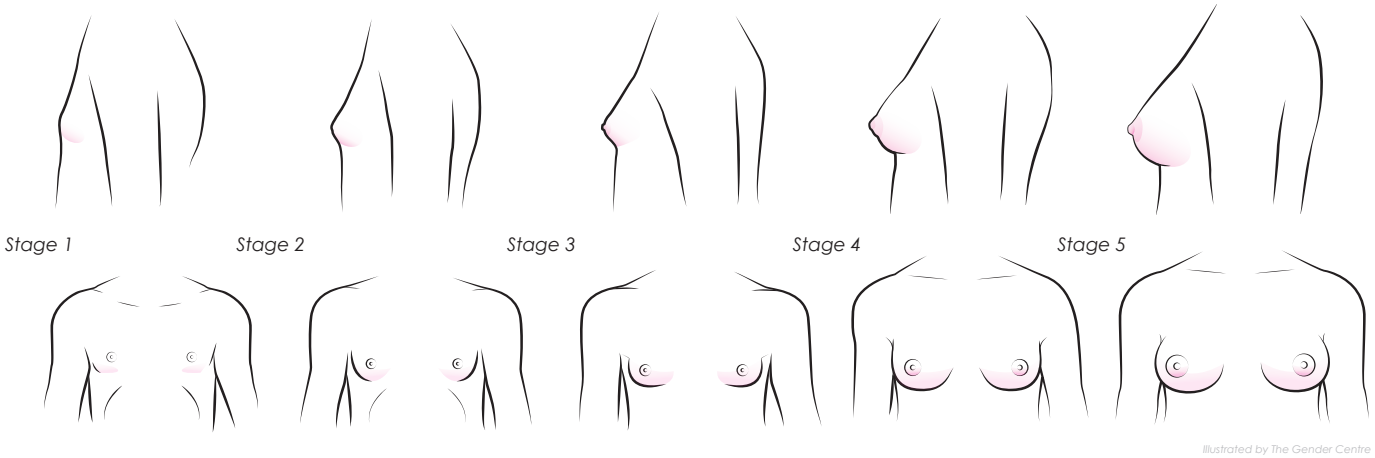
Body hair (chest, periareolar, shoulders, back, abdomen, rear, thighs, tops of hands, tops of feet) will, over time, turn from terminal hairs to vellus hairs (very tiny, blonde hairs). Hair on the arms, perianal, and perineal will reduce but may not turn to vellus hair on the latter two regions. Underarm hair will slightly change in texture and length, pubic hair becomes more typically feminine in pattern. Lower leg hair becomes less dense in concentration.

Mammary Gland Development

Everyone is born with milk ducts in their breasts. When feminising hormones are administered and a flood of oestrogen released, swelling and growth in the breasts begins to occur in what is effectively another puberty.

Externally, breast growth and development is medically defined by five "Tanner Stages".

- **Tanner Stage 1:** The undeveloped "pre-adolescent" pre-hormone type breast consists of a small elevated nipple (papilla) only, with no significant underlying breast tissue.
- **Tanner Stage 2:** After about six weeks of hormone treatment, subareolar nodules may be felt and the nipple becomes sensitive. After about three months breast buds may visibly start to form. There is an elevation of the nipple and surrounding breast area as a small but increasingly obvious mound, and the areola diameter may begin to enlarge (particularly in young women). Milk ducts inside the breast begin to grow.
- **Tanner Stage 3:** This stage may be reached between six months and a year after starting feminising hormone treatment. There is further enlargement and elevation of the breast and areola (with no separation of their contours). The areola may begin to darken in colour. The milk ducts give rise to milk glands that also begin to grow.
- **Tanner Stage 4:** If achieved, it will take one to two years to reach this stage. There is a projection of the areola and papilla to form a secondary mound above the mound of breast tissue.
- **Tanner Stage 5:** Very few of those undergoing hormonal treatment seem to reach this mature stage, after two or three years of hormone treatment. The breast has now fully filled out and only the nipple still projects, the areola has recessed and become part of the general breast contour i.e. the secondary mound has disappeared.



After feminising hormones are commenced, the breast slowly evolves and gradually increases in size, often with periods of growth and periods of apparent standstill. In the initial phase of hormone therapy subareolar nodules, which can be painful, are common.
Breast growth is irreversible without reduction surgery, stop taking the hormones and the breast growth that has been stimulated will remain.

It is quite common after genital surgery to experience a breast tissue growth spurt. It should also be expected that the breasts will grow unevenly in comparison to each other. In the long-term the differences will mostly even out, but even in those that have undergone a feminising puberty as a teenager there is often a quite visible difference in size and shape between the left and right breast.
The final amount of breast development obtained by a person undergoing feminising hormone treatment varies, but it is known to be very age dependent, the younger a person the better the development seems to be. Genetics also seem to play a significant role.
Breast implants will look most natural if you wait to get as much growth as you can from undergoing feminising hormone treatment.

Fat Tissue Distribution

Fat distribution in the body slowly changes over months and years. The body will now tend to accumulatenew fat tissue in a typically feminine pattern. This includes the hips, thighs, rear, pubis, upper arms, and breasts. The body will now tend to burn the old fat tissue in the waist making the waist appear smaller as well as on the shoulders and back. Subcutaneous fat tissue also increases in the face.

Urogynecological Effects

Trans people undergoing feminising hormone treatment often report a significant reduction in libido depending upon the dosage of anti-androgens. Spontaneous and morning erections decrease in frequency significantly; however some who have had an orchiectomy still experience morning erections. Voluntary erections can be maintained since the brain is the most important sex organ. Testicular volume is reduced by about 25% with typical dosages and as much as 50% in higher dosages, especially after a year of hormone treatment. When testosterone is dramatically reduced, spermatogenesis is halted almost completely.

When the cells that are involved in these processes
go unused they atrophy (shrink). The prostate and bladder also shrink, the line that runs down the underside of the penis and down the middle of the scrotum will darken and minor water retention is likely.

Metabolic

Oestrogen therapy causes decreased insulin sensitivity which places individuals at an increased risk of developing type II diabetes. One's metabolism slows down and one tends to gain weight, lose energy, need more sleep, and become cold more easily. Due to androgen deprivation a loss of muscle tone, a slower metabolism, and physical weakness becomes more evident. Building muscle will take twice as much work as before.

MANAGEMENT OF YOUR HORMONE REGIMEN

A certain amount of psychological counselling is often required before being prescribed feminising hormone treatment. Many therapists require at least three months of continuous psychotherapy in order to write a letter prescribing hormones.

Once a letter prescribing hormones has been written, one should acknowledge that there is no ‘one’, ‘right’ hormone combination, type, or dose. Deciding what to take depends on your health as each medication has different risks and side effects and how your body reacts when you start taking hormones. Everyone’s body is different and sometimes people have a negative reaction to a specific kind of medication.
Most of the methods of delivery of the medications involved in hormone therapy are processed by the liver. There is a possibility that taking hormones over a long period of time can put strain on the liver, possibly leading to liver disease. It is generally recommended that those undertaking feminizing hormone treatment undergo regular liver function tests.

A number of pre-existing conditions may also reduce the likelihood that a doctor will prescribe feminising hormone treatment to a patient. Factors restricting access to feminising hormone treatment include a history of oestrogen sensitive cancer (for example breast cancer), a history of thromboemboli disease (unless provided with concurrent anti-coagulation therapy), or a history of macroprolactinoma (pituitary tumour).

Other restrictive considerations include liver, kidney, or heart disease and stroke (or any of the risk factors for heart disease: high cholesterol, diabetes, obesity, smoking); a strong family history of breast cancer or thromboemboli disease; gallbladder disease; circulation or clotting conditions.
Many of the known risks of feminizing hormones can be reduced by creating a hormone combination that is tailored to your specific situation. Prevention includes periodic blood tests to keep an eye on potentiall risky conditions, and minimizing other health risks. Stopping smoking is the most important thing you can do to reduce your risk of blood clots and heart disease (and also make it possible to increase the amount of oestrogen that can safely be prescribed).

Once on female hormone treatment, advice of a physician should be sought if developing any of the following conditions: Elevated blood pressure, Benign liver tumour, Hepatitis, Pulmonary embolism, Thrombophlebitis, Gallbladder disease, Carcinoma of the breast (Breast Cancer) or other oestrogen-dependent neoplasia, nausea, vomiting, breast lumps, abnormal bleeding, leg cramps, water retention, headache, dizziness and light-headedness.
Any drug can cause adverse reactions with other medications so it is wise to check with a doctor or pharmacist when starting any new medication.

In prescribing a particular medication and dosage, your doctor should consider your health, including any other medications you are taking. Taking more hormones than the dose you were prescribed is not a good way to try to speed up changes. Taking a higher dose can actually slow down the changes you want: extra oestrogen in the body can be converted to testosterone by an enzyme called aromatase. Taking more than your prescribed dose also greatly increases your health risks.

Most of the effects of hormones happen in the first two years. During this time, the doctor who prescribes your hormones will want to see you on a regular basis. As long as you are taking hormones you will need to have regular physical exams and blood tests to monitor your overall health. It is also unknown whether hormone therapy causes any risk of breast cancer. Depending on your age, family history, and other risks for breast cancer, your health care provider may recommend regular mammograms. If you are older than 50, your health care provider should check your prostate regularly also.

Most of the changes brought on by feminising hormone treatment are not permanent. If you stop taking the medication most of the changes will reverse themselves. Breast development and sterility are however two changes that may be permanent. Although anti-androgens and oestrogen affect sperm production and can make you permanently sterile, there may still be a chance that you could make someone pregnant even after starting hormone treatment depending on how you have sex, you may need to consider birth control options. Hormone therapy doesn't decrease the risks of HIV and sexually transmitted infections.

Depending on how you have sex, you may need to consider condoms, gloves, or other latex barriers. Feminising hormones can make erections less firm, increasing the risk of condom leakage. In this situation your partner can use a special condom that they put inside their anus or vagina (they're called "female condoms" but can be used by people of all genders).

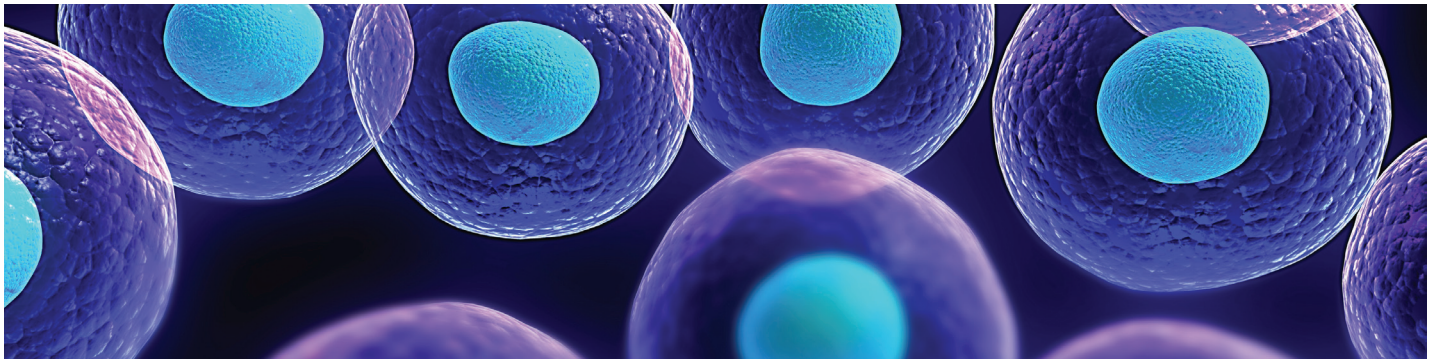
RISKS & SIDE EFFECTS

Taking oestrogen increases the risk of blood clots. Blood clots can cause death, permanent lung damage (clot in the lungs), permanent brain damage (stroke), heart attack, or chronic problems with the veins in your legs. The risk of blood clots is much higher for smokers, especially those who are age 40 or over. Taking oestrogen changes the way your body metabolizes and stores fat. Taking oestrogen can increase deposits of fat around your internal organs, which is associated with increased risk for diabetes and heart disease.

Oestrogen also increases the risk of gallstones, which can block your gallbladder. If you have chest or abdominal pain, you should see a medical professional right away. In some people oestrogen causes nausea and vomiting, similar to morning sickness in pregnant women. Oestrogen can also cause headaches or migraines. If you are experiencing frequent headaches/migraines or the pain is unusually bad, or if you are vomiting for more than a couple of days, talk to a health professional. Oestrogen can also cause increased blood pressure.

With breast growth there is often an increase in milky discharge from the nipples (galactorrhea). This is caused by the oestrogen stimulating the production of the hormone called prolactin, which in turn stimulates breast ducts to form milk. It is not known whether this increases the risk of non-cancerous tumours of the pituitary gland, which produces prolactin (prolactinoma). Although prolactinoma is usually not life-threatening, it can damage vision and cause headaches. For this reason, blood levels of prolactin are usually checked for at least three years when you start taking oestrogen, and further tests may be ordered if prolactin levels are very high or if prolactinoma is suspected.

It is not known if oestrogen increases the risks of breast cancer. There have been cases of people who have developed breast cancer after starting hormones. Risks of breast cancer are increased if you have a family history of breast cancer, have been taking oestrogen and/or progestagens for more than 5 years, are age 50+, or are overweight. Talk with your health care provider about screening tests that can be done to catch early signs of breast cancer.



WHAT HAPPENS IN AN OESTROGEN INDUCED PUBERTY?

Puberty is the process of physical changes by which a child's body matures into an adult body capable of reproduction. Puberty is initiated by hormone signals from the brain to the gonads (the ovaries and testes). In response, the gonads produce a variety of hormones that stimulate the growth, function, or transformation of brain, bones, muscle, blood, skin, hair, breasts, and sex organs.

Before puberty, physical differences in children are almost entirely restricted to the genitalia. During puberty, major differences of size, shape, composition, and function develop in many body structures and systems. The most obvious of these are referred to as secondary sex characteristics.

PHYSICAL CHANGES

Breast Development

The first physical sign of puberty is usually a firm, tender lump under the centre of the areola of one or both breasts, occurring on average at about 10.5 years of age. This is referred to as thelarche. By the widely used Tanner staging of puberty, this is stage 2 of breast development (stage 1 is a flat, prepubertal breast). Within six to twelve months, the swelling has clearly begun in both sides, softened, and can be felt and seen extending beyond the edges of the areolae. This is stage 3 of breast development.

By another twelve months (stage 4), the breasts are approaching mature size and shape, with areolae and papillae forming a secondary mound. In many, this mound disappears into the contour of the mature breast (stage 5), although there is so much variation in sizes and shapes of adult breasts that stages 4 and 5 are not always separately identifiable.

Pubic Hair

Pubic hair is often the second noticeable change in puberty, usually within a few months of thelarche. It is referred to as pubarche. The pubic hairs are usually visible first along the labia. The first few hairs are described as Tanner stage 2. Stage 3 is usually reached within another six to twelve months, when the hairs are too numerous to count and appear on the pubic mound as well. By stage 4, the pubic hair densely fills the 'pubic triangle'" Stage 5 refers to spread of pubic hair to the thighs and sometimes as abdominal hair upward towards the navel.

Vagina, Uterus, Ovaries

The mucosal surface of the vagina also changes in response to increasing levels of oestrogen, becoming thicker and duller pink in colour (in contrast to the brighter red of the prepubertal vaginal mucosa). Whitish secretions (physiologic leukorrhea) are a common effect of oestrogen as well. In the two years following thelarche, the uterus, ovaries, and the follicles in the ovaries increase in size. The ovaries usually contain small follicular cysts visible by ultrasound.

Menstruation and Fertility

The first menstrual bleeding is referred to as menarche, and typically occurs about two years after thelarche. The average age of menarche is 11.75 years. The time between menstrual periods (menses) is not always regular in the first two years after menarche.

Ovulation is necessary for fertility, but may or may not accompany the earliest menses. Post-menarche, about 80% of the cycles are anovulatory in the first year, 50% in the third year and 10% in the sixth year. Initiation of ovulation after menarche is not inevitable. A high proportion of those with continued irregularity in the menstrual cycle several years from menarche will continue to have prolonged irregularity and anovulation, and are at higher risk for reduced fertility. Nubility is used to designate achievement of fertility.

BODY SHAPE, FAT DISTRIBUTION, AND BODY COMPOSITION

During this period, also in response to rising levels of oestrogen, the lower half of the pelvis and thus, the hips widen (providing a larger birth canal). Fat tissue increases, especially in the breasts, hips, buttocks, thighs, upper arms, and pubis.

MAXIMIZING THE BENEFITS, MINIMIZING THE RISKS

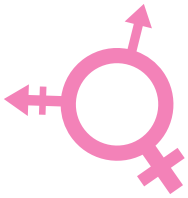
The following information has been provided from a booklet titled "Hormones, a Guide for MTFs" published by Vancouver Coastal Health Transcend Transgender Support & Education Society and Canadian Rainbow Health Coalition.

There are a number of things that you can do to help ensure your hormone therapy is as effective and safe as possible:

- Be informed. Understanding how hormones work, what to expect, possible side effects/risks, and guidelines for care gives you the tools to be in charge of your health and to make informed decisions. Do your own research and ask questions.
- If you smoke, stop or cut down. Smoking greatly increases the risks involved with hormone therapy. If you are a smoker, your oestrogen level may have to be kept low.
- Find a health care provider you trust and can be honest with. To get the most from hormone therapy, you need to be able to talk openly about what you want, concerns you have, and any problems you are experiencing. You also need to be able to talk openly with your health care provider about your health history, smoking, alcohol, street drugs, dietary supplements, herbs, and any other medication you are taking. Hormone therapy can be affected by all of these things, and being honest about them will help create a plan that is right for you.
- Deal with problems early on. If caught early enough, most of the problems that can result from taking hormones can be dealt with in a creative way that doesn't involve stopping hormones completely. Waiting can worsen your health to the point where you can't take hormones at all.
- Don't change medication on your own. Check with your health care provider if you want to start, stop, or change the dose of any of your medication. Taking medication more frequently or at a higher dose than prescribed increases health risks and can slow down the effects you want. Going against the instructions of your health care provider also erodes trust with them. If you want to change your medication, talk with your health provider first.
- Take a holistic approach to your health. Health involves more than just hormone levels, and taking hormones is only one way for trans people to improve quality of life. Building a circle of care that includes health professionals, friends, partners, and other people who care about you will help support you to deal with other health problems as they come up, and to heal from societal transphobia.
- Know where to go for help. Staff at the Gender Centre can help you find information on trans health and transition issues, and can also help you connect with trans groups and community resource in your region. They can help with referrals if you need assistance finding a trans-experienced medical provider, counsellor, or another type of health professional.

The **Gender Centre** is committed in developing and **providing services** and **activities** which enhance the ability of the **transgender** and **gender diverse** community to make informed **choices**.

We specifically aim to provide a **high quality** service which acknowledges **human rights** and ensures **respect** and **confidentiality** to all.



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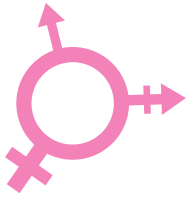

SOURCES OF FURTHER INFORMATION:

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