



I AM TRANS
FEMININE
AND I THINK
I WANT TO
START USING
HORMONES!

WHAT SHOULD I KNOW
BEFORE I BEGIN?



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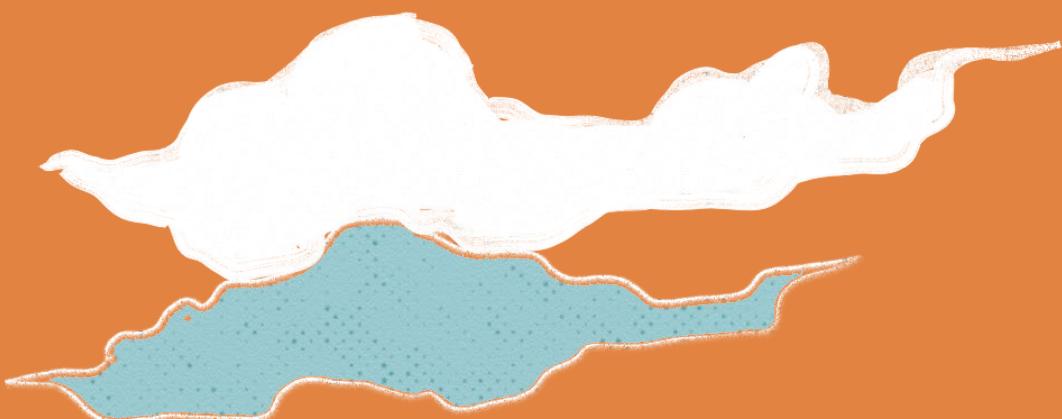
WHO IS THIS FACTSHEET FOR?

This factsheet is for trans women, trans feminine and gender diverse people who may be thinking about using hormones also known as Gender Affirming Hormone Therapy (GAHT). This factsheet provides a brief overview of the benefits, side effects and risks about starting hormone therapy.

This factsheet should not be used to practice self-medication. We strongly encourage that you speak with a medical professional before you start hormone therapy as each individual is unique and requires a specific medical plan.

This factsheet will help you to understand:

- How hormones work;
- Some of the changes you may expect once on hormone therapy including side effects and risks, and;
- Some frequently asked questions that may help you to make an informed choice about starting hormones.



WHAT IS TRANSITIONING?

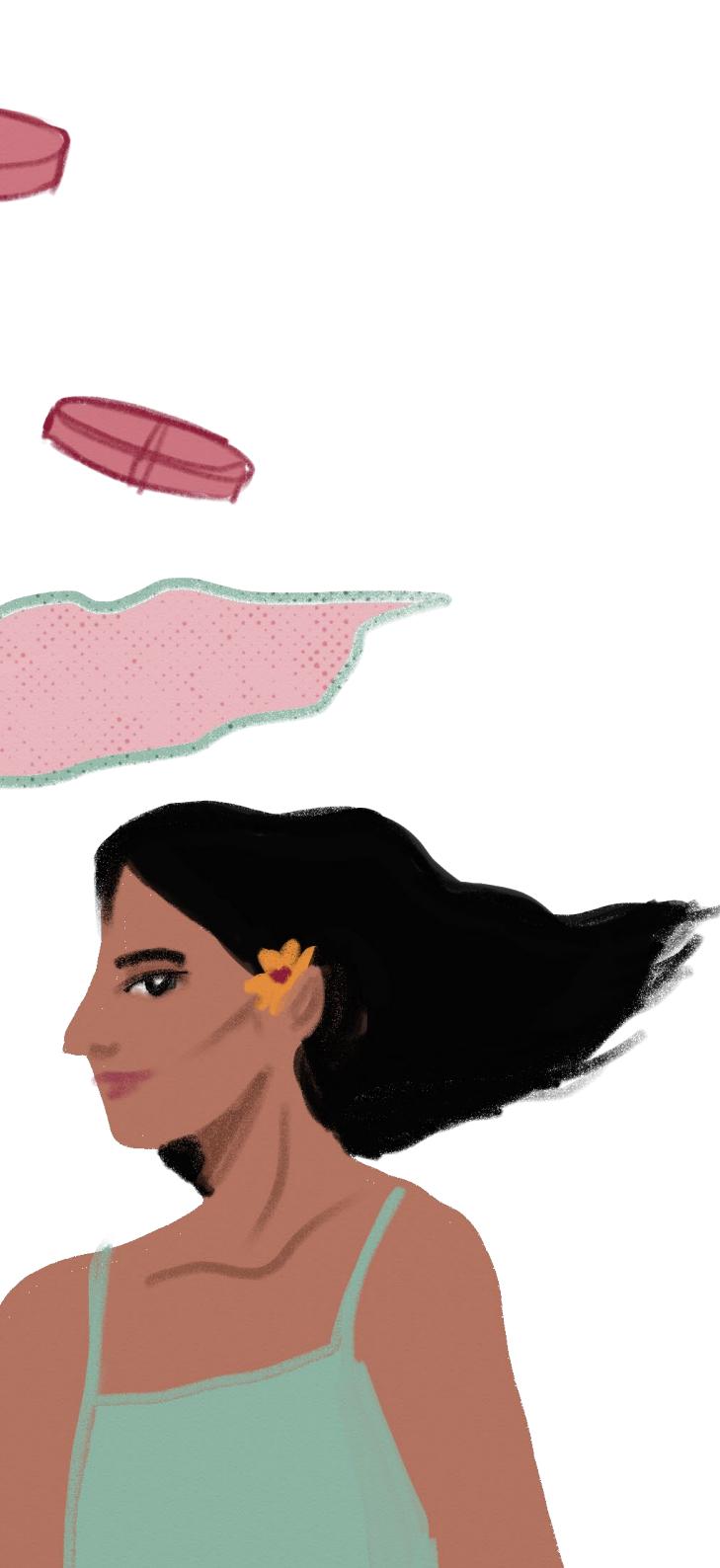
Transitioning is when you begin to take steps towards living in your gender identity. It can start with thinking about how you may want to present your gender identity to others. Other ways can include, wearing the clothes that affirm your gender, growing your hair long, wearing make-up or tucking your genitals. It can also include medical interventions such as taking hormones, getting breast implants, genital reconstruction surgery to remove your testes and construct a vagina and other feminisation procedures including plastic surgery and hair removal.



WHAT IS GENDER AFFIRMING HORMONE THERAPY (GAHT)?

Gender Affirming Hormone Therapy (GAHT) is one way of medically transitioning into the gender you feel on the inside which can increase your happiness and well-being. Hormones can help you to physically transition by creating feminine characteristics in your body including, for example, breast growth, reducing hair growth and redistribution of fat around the body to make you look more womanly.





Not all transgender people want or need to take hormone therapy to affirm their gender, there are many different ways for people to express their gender and this is an individual choice. While medically transitioning is important for some trans people to improve their overall health and well-being, not every trans person can or wants to medically transition. Some people may choose to only use hormones, some people only want top surgery, and some people may not want to medically transition at all.

You will need to speak with your healthcare provider regarding how long you might need to take hormones. Hormones usually need to be taken for the rest of your life if you want to maintain these physical changes throughout your life. If you decide to have genital surgery, you will need to speak with your doctor as while you may need to continue to take hormones, your regime will change. Some forms of gender-affirming surgery requires you to stop taking hormones for a certain period of time before undergoing surgery. It is important that throughout your life while you are taking hormones, you have regular blood and medical tests to make sure

that you have chosen the right hormone therapy for your body and that your body is responding well. Taking large amounts of hormones will not change your body faster. In fact, it may cause long-term health problems.

When you start taking hormones it may take some time to see changes in your body. It can take up to 3 years to see the maximum effect of the changes once you start taking hormones regularly. Hormone therapy can make you feel more comfortable in your body but it is also important to note that taking hormones may not necessarily cure your depression, body image or discomfort or conflicting feelings (dysphoria) you may have around your physical body and your gender identity.

We strongly advise you to see a medical and mental health professional before you begin taking hormones. This factsheet does not replace medical advice, it is an informational guide to support you to be informed about the process when you start discussing hormone therapy with your healthcare provider.

WHAT ARE HORMONES?

In our bodies we have glands that produce many different hormones that help our body work in different ways. Some of those hormones include sex hormones. Sex hormones cause changes in our bodies during puberty (body growth, facial/body hair growth, breast growth, voice changes, and more). The main sex hormone produced in trans people assigned male at birth (trans feminine people) is testosterone, and for trans people assigned female at birth (trans masculine people) is estrogen. Everybody, including non trans people (cisgender), naturally produce quantities of both testosterone and estrogen in varying degrees.

Feminising and masculinising hormones cause physical changes similar to that of puberty. The amount to which one experiences these changes is dependent on genetics. Everyone has a different response to hormones. This is why it is always important that you receive medical advice before starting hormone therapy to make sure you get the right balance of hormones for maximum results.



GETTING STARTED



Before you start transitioning a knowledgeable medical health provider or mental healthcare provider such as a counsellor, therapist or psychiatrist will most likely diagnose you with Gender Dysphoria or Gender Incongruence. This means that you are not comfortable or feel that your gender identity is different from your sex assigned at birth.

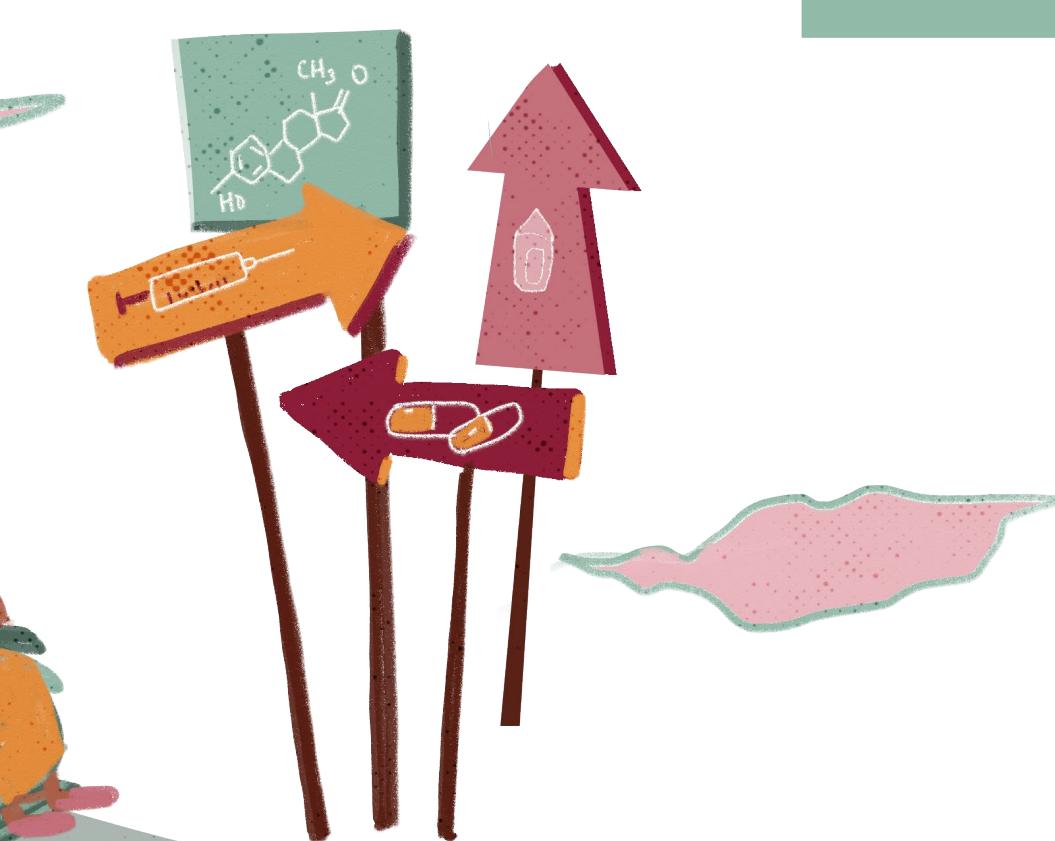
They will do some tests and check your physical medical condition to make sure that it will not make your mental or physical health worse. They will measure your hormone levels to develop a hormone therapy plan to make sure that the hormones you will be taking are within the normal range for you to have the best outcomes physically and mentally. Ideally you should also get access to a counsellor who will explain the process of transitioning, including how long it will take, how to take hormones safely, some of the side affects you might experience and how to deal with them.

HORMONES

SO, WHAT HORMONES DO I TAKE TO START TRANSITIONING?



If you are a **trans woman, gender diverse or non-binary and want to change your appearance to be more feminine**, your healthcare provider might advise you to take a combination of hormones to support your body to develop the physical feminine traits that match your gender identity.



ESTROGEN

This is the hormone that is primarily responsible for increasing the physical feminine traits in your body. It works on the tissue in your body, such as making breast grow, and redistributing the fat in your body, and indirectly suppresses the amount of testosterone in your body. There are three different ways you can take estrogen:

1. Pill form (to be swallowed or dissolved on the tongue),
2. Skin patch or a gel to be applied into your skin,
3. Injection that is delivered into your muscle (intramuscular).

RISKS

The pill and injection can sometimes cause blood clots in the body; it is NOT generally recommended for people who are over the age of 40, people who smoke and/or are at risk of heart disease or stroke or blood clots. If you are more at risk, it is usually recommended to use the skin patch or gel. There are some types of estrogen, for example 17-beta estradiol which can reduce some of these risks. You should seek advice from your healthcare provider about this.

OPTIONS

ANTI-ANDROGENS

These drugs are sometimes prescribed by your healthcare professional to block the effect of testosterone in your body. It works by complimenting the estrogen to reduce the male physical traits, but they DO NOT increase feminising physical traits. Anti-androgens can be prescribed in addition to estrogen. Taking anti-androgens can mean you take less estrogen and avoid some of the risks that come with taking high doses of estrogen. They usually come in pill form.

RISKS

Some side effects associated with taking anti-androgens include depression, electrolyte imbalance, especially potassium level, and your liver function, so it is important that you consult your doctor to make sure that you use the right one and have regular tests to monitor the effects of estrogen and anti-androgens.

IF YOU ARE INJECTING

It is essential that you dispose of your needles or hormone bottle correctly and DO NOT share your used needle with anyone else (NOT even your closest intimate partner). Using a used needle could increase your risk of blood borne infections and transmission of HIV and Hepatitis C. Immediately visit a doctor if you are experiencing symptoms such as fevers, chills, nausea, red or painful skin at the injection site that is hot to touch, or if the site is discharging (white or yellow fluid).

RISKS



IF I TAKE HORMONES WHAT KIND OF PHYSICAL CHANGES WILL I EXPECT TO SEE?



If you were assigned male at birth and you took estrogen you would expect to see some of the following changes in your body to a varying degree:

- Reduction in muscle mass, and redistribution of fat to the hips.
- Decreased of the size of your genital and testicles as well as the erectile function. This may also effect your orgasm.
- Your breasts may feel tender and lumpy and may sometimes slightly increase in size.
- Hair growth on your face and body may reduce.



TRANS
RIGHTS
NOW!



IF I TAKE HORMONES WHAT KIND OF PHYSICAL CHANGES WILL I EXPECT TO SEE?

If you are taking GAHT as prescribed by your healthcare professional and based on your individual needs, then most physical changes will safely occur within a period of two years with maximum effect over 3 years. How effective these changes will be depends on your GAHT regime and genetics, as well as your lifestyle choices including, smoking and exercise.

Changes you will see in your body after starting estrogen	Start	Maximum Effect
Decreased sexual desire	1–3 mo	3–6 mo
Decreased spontaneous erections	1–3 mo	3–6 mo
Softening of skin/decreased oiliness	3–6 mo	Unknown
Decrease in muscle mass and strength	3–6 mo	1–2 y
Redistribution of body fat	3–6 mo	2–3 y
Breast growth	3–6 mo	2–3 y
Decreased testicular volume (size of your testicles will decrease)	3–6 mo	2–3 y
Decreased sperm production	Unknown	> 3 y
Decreased terminal hair growth (usually mild)	6–12 mo	> 3 y
Scalp hair	Variable	—
Voice changes	None	—
Male sexual dysfunction (ability to get an erection)	Variable	Variable

WHAT WILL NOT CHANGE AND WHAT CAN I DO ABOUT IT?

Gender Affirming Hormone Therapy may help you to feel less anxious, depressed and increase your self-confidence. Studies have shown that these are some positive effects experienced by people on GAHT. But there are some things that will not change when you start GAHT.

Physical: While some parts of your body may slightly change when you start GAHT, it will not remove ALL physical masculine traits.

- Body and/or Facial **hair growth** may reduce but it will not go away entirely. Electrolysis and/or laser hair removal treatment is usually used for hair removal.
- **“Male” Pattern Baldness:** If you were balding before GAHT, bald areas will not grow back. Some people will wear a wig or hair piece, others may get hair transplants.
- **Changes in Voice:** GAHT will not change the pitch of your voice, some people take speech therapy classes to retrain the way they speak, others may have surgery around their vocal chords to speak at a higher pitch.
- **Changes in Height:** Your bones stop growing after puberty, so GAHT will not change your height or the bone structure in your body including your hands, feet, or face. Some people undergo facial feminisation surgery and plastic surgery to change the shape of their face and body and reduce the size of their Adams apple.
- **Sperm Count:** GAHT can reduce your sperm count and make you permanently sterile, but this may not always be the case. Depending on how and who you have sex with, you may want to consider using a birth control method to prevent unwanted pregnancy.





Psychological: GAHT is not a magic bullet that will make you feel like now your physical appearance matches your gender identity. While many people feel happier and have greater self acceptance after starting GAHT, it may not solve ALL of your problems. For each of these issues, it is suggested that you visit a mental health professional to assist you in finding strategies to help deal with these feelings.

- **Personality:** It is unlikely that your personality will change after starting GAHT. You may feel more confident but if you were shy before taking hormones, you will most likely still be shy after taking hormones. However, your confidence in how you present yourself might improve as you feel good about yourself.
- **Depression and Anxiety:** Your depression and anxiety around your body may reduce, however mental health issues like depression and anxiety that stem from experiences of stigma, discrimination and exclusion due to transphobia and your gender identity may still exist.
- **Addiction:** If you had problems with drugs and alcohol before starting GAHT, these issues may still exist afterwards.

EXPECTATIONS



Taking increased doses of estrogen and anti-androgens will not make these changes happen faster. You might want to buy hormones from the internet or from the pharmacy or drug store but taking medication not prescribed from a genuine medical provider can put your health at risk. For example, if you are thinking about buying hormones from the internet or from pharmacies or drug stores without a prescription:

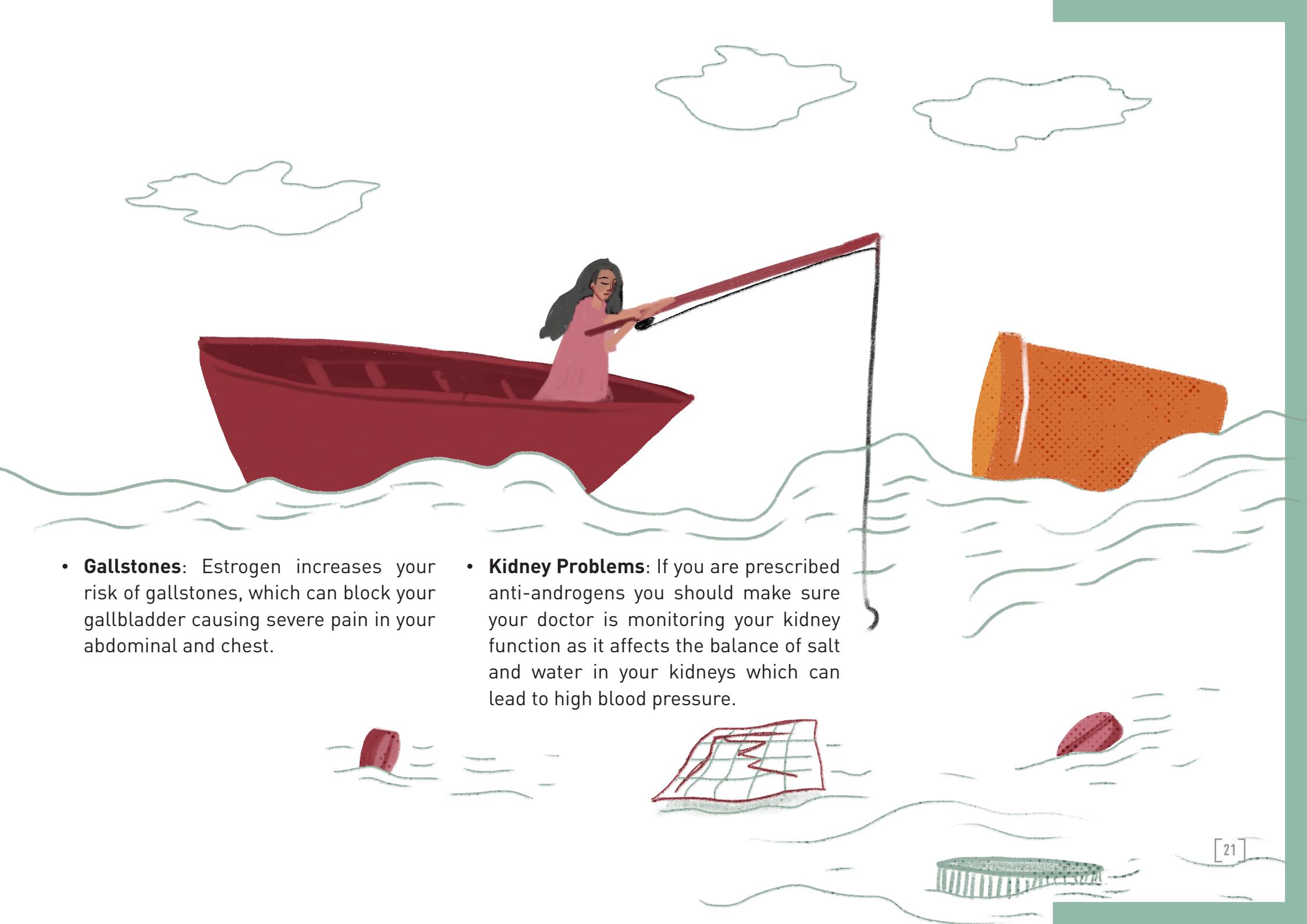
- The hormones may not be genuine and therefore may not have any effect at all.
- They might be of poor quality or be something else and cause greater harm to your body and health.
- There may be interactions with other medicine or herbal remedies you may be taking.
- The dosage in the medication may not be right for your needs.
- You may not have enough understanding of the risks associated with taking hormones.

BE PATIENT

WHAT ARE THE SIDE EFFECTS OF GAHT?

There is currently limited understanding of the long-term effects of using hormones. However regular check-ups including blood tests and a GAHT regime that is tailored to you, can help you to manage and reduce any risks that may arise. It is important to note that this is not an exhaustive list and there may be other side effects not mentioned here.

- **Liver Function:** Because your hormones are processed by your liver, it is important that you have regular liver function tests (LFT) to monitor the potential impact. This is especially the case if you have Hepatitis B or C, if you are a heavy drinker or if you are in any way more likely at risk of liver disease.
- **Blood Clots:** Estrogen increases your risk of blood clots. Blood clots can cause permanent lung and brain damage, heart attack and clots in the veins in your legs. This is especially the case if you are a smoker and some doctors may not prescribe you estrogen if you smoke or will give you a lower dose.



- **Gallstones:** Estrogen increases your risk of gallstones, which can block your gallbladder causing severe pain in your abdominal and chest.

- **Kidney Problems:** If you are prescribed anti-androgens you should make sure your doctor is monitoring your kidney function as it affects the balance of salt and water in your kidneys which can lead to high blood pressure.

- **Other Physical Health Concerns:** Include high blood pressure, nausea, vomiting, headaches, and increased risk of diabetes and heart disease due to the increased fat around your organs. While there are no conclusive studies to determine if trans women are more at risk of breast cancer or not, it is important to consult with your doctor to see if you may have any factors that could increase your risk. Additionally, growing pains may cause discomfort, as breast tissue begins to develop you might experience soreness in your breasts and have sensitive nipples.
- **Mental Health:** You may experience various mood changes and other emotional feelings that are attributed to the changes of hormones in your body. Some hormones may also cause depression. Most importantly you should seek out or talk to your existing mental healthcare provider to help you manage your mental health and well-being.
- **Transitioning-related Consequences:** As you start transitioning your physical appearance will change, sometimes this can increase negative experiences from other people like discrimination, harassment and even violence. If you are experiencing any of these issues, it may help to talk to someone about them, for example, a trusted and accepting friend, loved one or family member or your mental healthcare provider to help you process these experiences and find solutions on how to cope. Discrimination, violence and harassment because you are trans is never acceptable. If you are experiencing these things especially from service providers, you may want to think about reporting it.



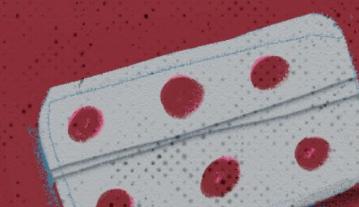
WHAT DOES A TYPICAL REGIMEN LOOK LIKE?

A GAHT regime will be developed based on your unique individual needs. Often GAHT regimes are based on national or international medical guidelines. Below are some of the regimes.

Hormone	Administration	Dosage	Timeframe
Estrogen			
Estradiol/ 17 β estradiol/ estradiol valerate/ estradiol hemihydrate	Oral/sublingual	2.0–6.0 mg	Daily
Estradiol/ 17 β estradiol/ estradiol valerate/ estradiol hemihydrate transdermal patch	Patch	0.025–0.2 mg	Daily
Estradiol valerate or cypionate	Injection (intramuscular)	5–30 mg	Every 2 week
Ethinylestradiol (not recommended)	Oral		
Anti-androgens			
Spironolactone	Pill	100–300 mg	Daily
Cyproterone acetate	Pill	25–50 mg	Daily
GnRH agonist (goserelin, buserelin, triptorelin)	Injection (sub cutaneous)	3.75 mg 11.25 mg	Monthly Every 3 month
5-alpha reductase inhibitors (finasteride and dutasteride)	Injection (sub cutaneous, it can also come as a pill)	1–5 mg	Daily



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WHAT ELSE DO I NEED ONCE I HAVE STARTED GAHT?

Once you start on GAHT you will need to have regular physical exams and lab tests. In general, your doctor may ask to see you every 3-4 months within the first year and then every 6 months after this and if there are no complications. You may be able to get your regular doctor to do these lab tests for you or you may have to go to an endocrinologist, which is a specialist that specialises in hormone disorders and therapies. It is not always easy to go see a doctor, especially in countries where you may not have trans-competent healthcare providers, so it is good to know what kind of tests you may need if you do go. Sometimes, it is also good to go with a friend as it can sometimes feel scary.



HEALTH



When you get your lab test, some of the things that should be monitored include:

Test	What is it for?	How often?	Normal range for people on GAHT
Estrogen level in the body	To monitor the level of estrogen in your body	Every 3–6 months in the first year and then 1–2 times per year	100–200 pg/ml
Testosterone levels in the body	To monitor the reduction of testosterone level in your body	Every 3–6 months in the first year and then every year	<50 mg/dL
Lipids, blood sugar, electrolytes	To test your kidney for damage or disease	Every 3–6 months in the first year and then every year	
Electrolytes, serum electrolytes, especially potassium	A specialised test for those on taking Spironolactone	Every 3–6 months in the first year and then every year	
Prostate Specific Antigen (PSA)	This is a blood test to screen for prostate cancer	Based on national guideline	Reduce the upper limit of normal to 1 ng/ml
Blood pressure	To assess and monitor your risk of heart disease and stroke	Every 3–6 months in the first year and then every year (or every annual visit)	
Weight	To ensure weight gain is within normal levels	Every 3–6 months in the first year and then every year (or every annual visit)	
Cardiovascular test	Tests to assess your risk of heart disease, diabetes, hypertension	Every year or more if indicated	
Liver function test	To monitor your liver for damage or disease	Every 3–6 months in the first year then every year	
Depression and anxiety	To monitor your mental health as you progress through your GAHT	Based on national guideline	

WHAT IF I STARTED TAKING HORMONES AND DECIDE I DO NOT WANT TO ANYMORE?

You may decide that you want to stop taking hormones, it is good to speak with your health care provider if you want to stop taking hormones. If you do stop taking hormones, you should note that not all the changes are reversible, it really depends on how long you have been taking hormones for.

Most of the changes brought on by “feminising” GAHT are not permanent and will reverse if you stop taking the hormones. However, the changes in your breast growth and sterility are irreversible. Estrogen causes irreversible nipple development and breast growth. Even if you stop taking estrogen, breast tissue will not go away and your nipples will not shrink. Feminising hormones will also impact your sperm count and may have an effect on whether you can have biological children or not. If you are thinking about starting a family, you can speak to your doctor about what your options are.





FREQUENTLY ASKED QUESTIONS

1. IF I TAKE A LARGER DOSE, WILL I GET MORE CHANGES FASTER?

No. Taking larger doses of hormones will NOT help you to transition faster. It is important that you stick with the advice of your medical professional who may start you on smaller doses to see how your body will react to the hormones and increase your dosage as per your medical plan. In fact it is very dangerous to take large doses of hormones. It can put a great strain on your body and have long-term negative effects that may in the future stop you from achieving maximum benefits with GAHT and your transitioning goals for yourself.

2. I AM NOT SEEING A CERTAIN CHANGE, IS SOMETHING WRONG?

GAHT takes time to work. It can sometimes feel very frustrating when you want to see changes happen quickly, especially as you might have been looking forward to transitioning for such a long time. It does not necessarily mean anything is wrong, it could be that the medication you are using may not be right for you or that you may need to adjust your dose. If you feel like you are not seeing the changes you want, it is very important to speak with your health care provider to find out why.





3. HOW LONG DO I HAVE TO TAKE HORMONES? WILL I BE ON THEM FOR MY WHOLE LIFE?

You will need to take hormones for the rest of your life. If you decide to have genital reconstruction surgery, to remove your testes and/or construct a vagina, your dose of estrogen will most likely be reduced, but you will need to keep taking it to maintain the feminising physical traits and prevent osteoporosis.

4. ARE HORMONES SAFE? HOW CAN I CONVINCE MY PARENTS I WILL STILL BE HEALTHY?

Using hormones is safe as long as you have a medically trained healthcare provider to monitor the effects on your body. Talking to your parents, intimate partner and friends about your choice to transition can be a difficult thing to do. It can sometimes help to have these conversations with your loved ones and the medical provider. While you may have been looking forward to transitioning your entire life, it does have huge physical, emotional and social challenges that can be helped by speaking with a mental health professional or counsellor.

FAQS

5. WHAT IF I WANT TO START A FAMILY?

There are many different ways of starting a family. If you think that you might want to have your own biological children in the future, it is important to speak with your medical healthcare provider about your options. You can store your sperm in a sperm bank before starting GAHT to use when you are ready. Over time GAHT will make you infertile which means you cannot have biological children. There is no clear information on how long it takes for GAHT to make you infertile. If you have already started GAHT, you will need to stop your therapy to restore your sperm production. If you remove your testes you will not be able to have biological children. It is also very important to note that GAHT is not a contraceptive method and depending on how you have sex you should use condoms to avoid unwanted pregnancy.

6. HOW DO HORMONES AFFECT ME WHEN I GET OLDER?

There is not enough research available to answer this question. It is very important that you are working closely with your medical healthcare provider to monitor your long-term progress on GAHT, this is usually through an annual checkup once you have settled on your established regime.



FAQS



7. IF I AM LIVING WITH HIV, DOES MY ART AFFECT MY HORMONE THERAPY?

If you are living with HIV and are on antiretroviral treatment (ART) you can still take hormones, however there are some hormones that can affect the effectiveness of ART. It is important to speak with your healthcare provider about this, so you have the best possible outcomes for your transitioning process and your health.

8. I AM THINKING ABOUT TAKING PREP, WILL IT AFFECT MY HORMONE THERAPY?

If you are or thinking about taking PrEP you can still take hormones, however you might need to discuss the different dosage available for PrEP to make sure that you are getting the maximal protection from HIV as well as the maximal effects from your hormone therapy. For trans women it is generally suggested to take a daily PrEP dose, however these details should be discussed with your healthcare provider.

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This publication is funded by The Global Fund to Fight AIDS, Tuberculosis, and Malaria under the scope of Key Populations Research and Advocacy Project, managed by APTN as Sub-Recipient and Save the Children, Nepal as the Principal Recipient.