



I AM TRANS
MASCULINE
AND I THINK
I WANT TO
START USING
TESTOSTERONE!
WHAT SHOULD I KNOW
BEFORE I BEGIN?

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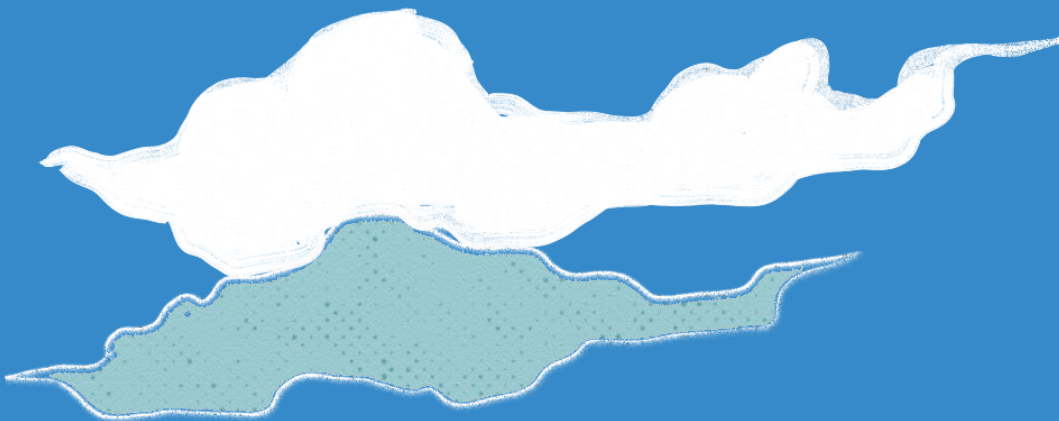
WHO IS THIS FACTSHEET FOR?

This factsheet is a guide for trans men, trans masculine and gender diverse people who may be thinking about using testosterone. This process of transitioning is called 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:

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



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, cutting your hair short, binding or flattening your breasts by strapping them with a binder or bandage, or wearing a packer to create a bulge in your pants. Transitioning can also include medical interventions such as taking hormones, breast and genital reconstruction surgery to remove your breast and construct a penis and testes and other masculinisation cosmetic procedures including plastic surgery.

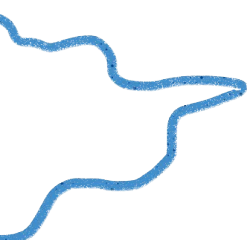


WHAT IS GENDER AFFIRMING HORMONES THERAPY (GAHT)?

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 masculine characteristics in your body, these could include a deeper voice, growing body hair, stopping your period and building muscle mass to make you look more manly.

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 gender affirming surgery (Gonadectomy), you will need to speak with your doctor as while you may need to continue to take hormones, your regime will change. 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 5 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.

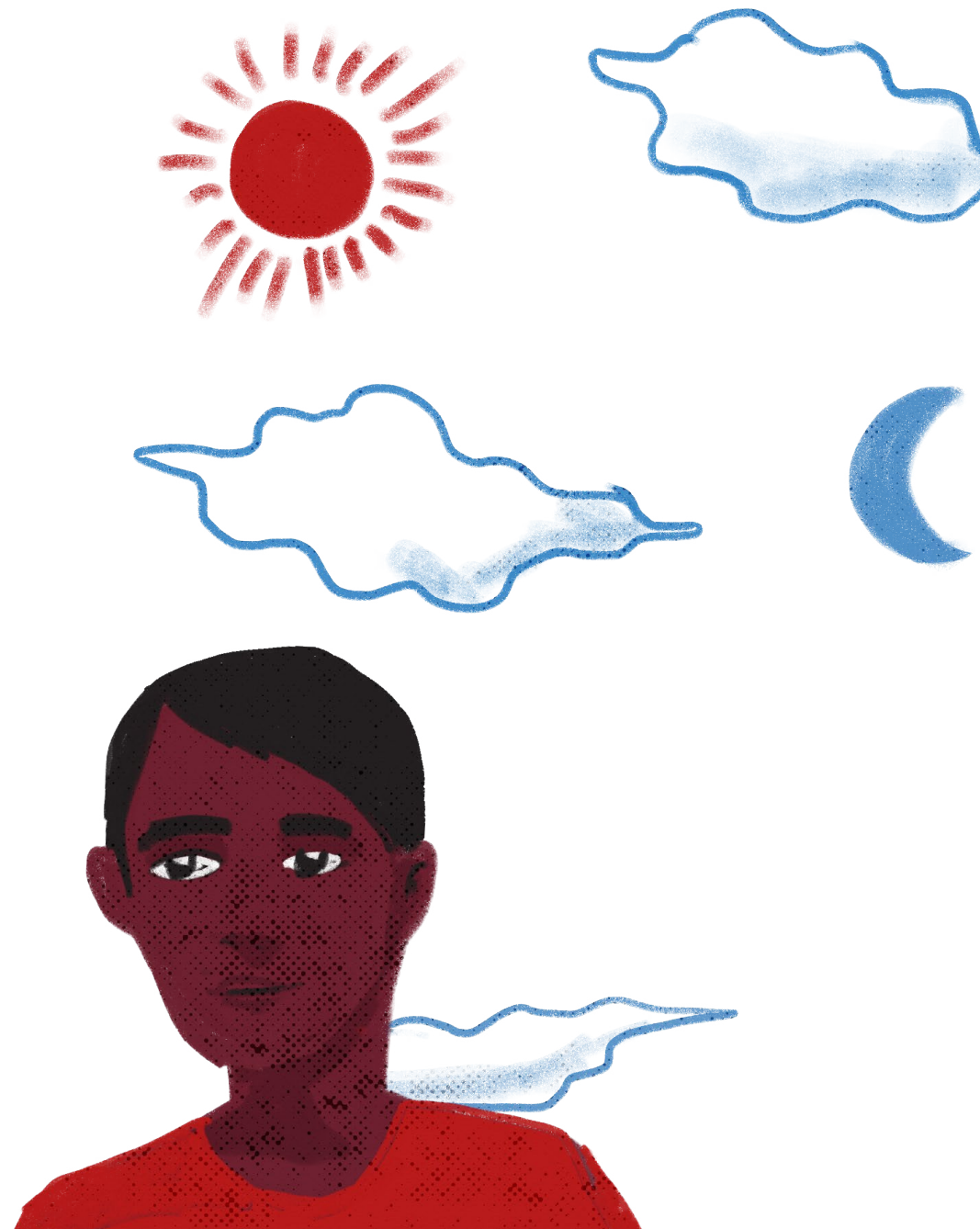
We strongly advise you to see a medical and mental health professional before you begin taking hormones. **This factsheet does not replace medical advice, it is an informational guide to support you to be informed about the process when you start discussing hormone therapy with your healthcare provider.**

HORMONES

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 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.



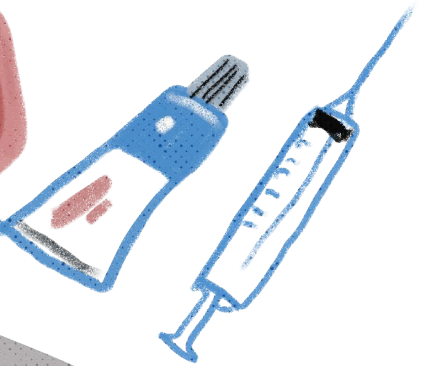
SO, WHAT HORMONES DO I TAKE TO START TRANSITIONING?



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

TESTOSTERONE

Testosterone is sometimes called “T” and stimulates the growth in the tissue in your body, for example, in building muscle mass, lowering your voice, increasing the growth of hair on your face and body, increasing your sex drive and stopping your period. It will also work to reduce the estrogen level in your body. It can take up to six months of being on testosterone to stop your period. If your period has not stopped within this time you should speak with your medical provider to discuss other medical options. There are three different ways you can take testosterone and there are pros and cons to each.



– PATCH OR CREAM/GEL

You can apply either a Testosterone patch, gel or cream to your skin. There are less side effects with this method as it keeps a more steady stream of testosterone in your blood and reduces some of the mood swings you might have when you inject testosterone. It is just as effective in supporting you to develop the physical masculine traits as the injection does, but it does take a bit longer to see some of the changes, for example, stopping your period and growing facial and body hair.

– INJECTION

The injection will bring changes faster than other methods, for example, stop your period faster. If you inject testosterone you may find that you have some mood swings at the beginning and end of the course. For example, when you first inject you might find your behaviour to be more aggressive than usual and when the testosterone starts wearing off you might feel more irritated or tired. If you are having mood swings, you should speak to your health care provider who might be able to suggest some changes in your therapy to manage it. The dose of testosterone you use will depend on where and how often you inject the testosterone in your body. Probably the most common method involves weekly or shots twice a week of testosterone. There are three options of injections:

- Intramuscular (IM): Using a long needle, you inject directly into a muscle usually the upper arm, butt cheek (glute), or thigh;
- Subcutaneous (SubQ): Using a shorter, smaller needle, this shot goes into fat in one's stomach or “love handles”.

OPTIONS

RISKS

Taking too much testosterone is NOT good for your body and will not bring about the changes you desire in your body faster. Taking too much Testosterone can also cause long term health problems. If your body does not use the excess testosterone it will be converted into estrogen (remember that estrogen is the hormone that develops the feminine physical traits in your body) and slow down the masculine changes you want to see in your body. If you have had surgery to remove your ovaries and uterus (hysterectomy) you will need to change your testosterone therapy as you might not require as much as before because you will not be producing as much estrogen. You might be also tempted to take steroids at the same time to boost your muscle mass but this is also not a good idea.

Everybody experiences these changes differently. You might find that some of your friends who are also on testosterone are experiencing changes faster than you but this is because testosterone works in different ways for different people. The amount of testosterone you take should always be based on the recommendations of the health care provider who will adjust it according to your hormone level test result. If you think that your dosage is not working fast enough you should talk to your medical health professional about it.

WARNING





IF YOU ARE INJECTING

It is essential that you dispose of your needles and hormone bottle correctly and DO NOT share used needles or hormone bottles with anyone else (NOT even your closest intimate partner). Used needles could increase your risk of blood 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).



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

If you took **testosterone** you would expect to see some of the following changes in your body to a varying degree. Most of the changes will happen within the first two years.


Changes you may see in your body after starting testosterone	Start	Maximum Effect
Period will stop	1–6 mo	–
Skin oiliness/acne	1–6 mo	1–2 years
Clitoris will grow in size	1–6 mo	1–2 years
Dry vagina and thinning of your vaginal walls which may cause pain	1–6 mo	1–2 years
Deepened voice	6–12 mo	1–2 years
Redistribution of body fat	1–6 mo	2–5 years
Increase in muscle mass and strength	6–12 mo	2–5 years
Loss of head hair	6–12 mo	4–5 years
Facial/body hair growth	6–12 mo	4–5 years

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

Physical: The shape and structure of your body stops changing after puberty so there will be some things that will not change in your body even after you start taking testosterone.

- **Breast Tissue:** While you may see that the shape of your chest has changed a little bit after taking testosterone, it will not make your breasts go away. Some people will have chest reconstruction surgery to remove their breasts while others may continue to bind or strap their breasts with bandages or binders.
- **Changes in Height:** Testosterone will not change your height or the bone structure in your body or face. Some people undergo facial masculinisation surgery and plastic surgery to change the shape of their face and body to be more masculine but it cannot help you with your height, hands, or feet.
- **Pregnancy:** Testosterone can make some people permanently sterile, but it is not always the case. You can still get pregnant even if you are using testosterone. There are some studies that have shown that even after using testosterone for two years some people were still producing eggs from their ovaries. Depending on how you have sex you may need to take some kind of birth control medication to reduce the risk of unwanted pregnancy. Pregnancy while on testosterone is very harmful to the fetus.
- **Risk of HIV and STI:** Depending on how you have sex, testosterone does not reduce your risk of transmission of HIV and STIs. Testosterone makes your vagina dry and your cervix more fragile. This can increase the risk of latex condoms breaking so you may need to use extra lubrication when you are having sex.





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 to 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 testosterone 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:

1. The hormones may not be genuine and therefore may not have any effect at all.
2. They might be of poor quality or be something else and cause greater harm to your body and health.
3. There may be interactions with other medicine or herbal remedies you may be taking.
4. The dosage in the medication may not be right for your needs. If you are taking too much testosterone, it can turn back into estrogen – the opposite of what you want!
5. You may not have enough understanding of the risks associated with taking hormones.

BE PATIENT

WHAT ARE THE SIDE EFFECTS OF TESTOSTERONE?

There is not a lot of research on the long-term effects of testosterone on trans men and trans masculine people. There is currently limited understanding of the long-term side effects of using hormones. However, regular check-ups including blood tests and a testosterone 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.

1. Abdominal Pain: You might find that when you are taking testosterone you get pain in your stomach similar to period pain. You might also find that your period has not gone away or that you are spotting. If this is still the case, you will need to speak with your doctor and might need to change your dosage because it might be too low or too high. This pain can also be managed by having an operation to remove your reproductive organs, also known as having a hysterectomy.

2. Headaches and Migraines: You might find that you have more headaches and migraines after starting testosterone. If this is the case you might need to adjust your dose. You should definitely speak to your medical healthcare provider about this if you are experiencing unusually bad pain.



3. Heart Disease, Stroke and Diabetes:

Testosterone can decrease your good cholesterol and increase the bad cholesterol in your body, and increase the fat around your internal organs and in your abdomen (stomach area). It can make you put on weight and can give you

high blood pressure. It can also affect the way you process sugars in your blood which can increase your risk of diabetes. It is important that you make sure your medical healthcare provider monitors your progress as you continue to use testosterone. While this may sound scary, these are the same risks that non trans men face too. Some ways in which you can reduce the risks are to stop smoking, exercise more often and eat well.



4. Increased Red Cells and Hemoglobin:

There is a possibility that testosterone could increase red blood cells and hemoglobin. In any case, tests to monitor your red blood cells and hemoglobin are routine as part of your hormone therapy. Those who have history of health issues related to red blood cell or hemoglobin should consult with the healthcare provider for intensive monitoring.

5. Cancer: Your risk of breast cancer or cancer in your cervix or uterus will depend on your age and your family history. If you have had surgery to remove your uterus and cervix, this will not be an issue for you. If you have not, you will need to talk to your healthcare provider and have regular pap smears to monitor. Whether you have had top surgery or not, you will still need to have a chest exam to monitor cancer risk in your chest area.

6. Mental Health: Taking testosterone can increase mood swings, such as irritability, aggression and frustration. It can also exacerbate some mental health issues such as bipolar and schizoaffective disorders like schizophrenia. You may be able to manage this better if you switch to daily dosing of testosterone (such as the patch, cream or gel). Most importantly you should seek out or talk to your existing mental healthcare provider to help you manage your mental health and well-being.

7. Transitioning-related Consequences:

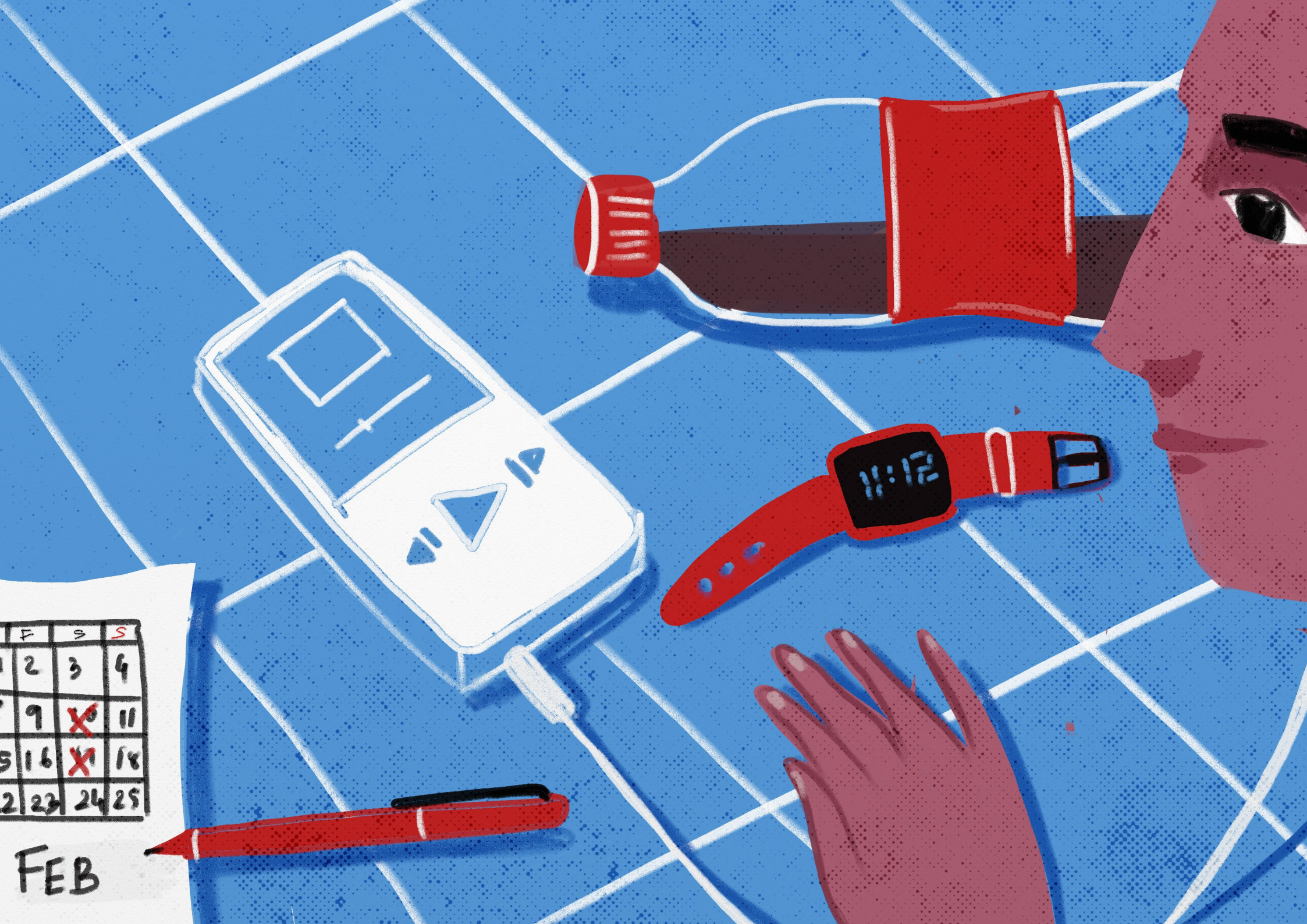
As you start transitioning, your physical appearance will change, sometimes this can increase negative experiences from other people like discrimination, harassment and even violence. If you are experiencing any of these issues, it may help to talk to someone about them, for example, a trusted and accepting 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
Testosterone			
<ul style="list-style-type: none">• Parenteral testosterone• Testosterone enanthate or cypionate	Injection (intramuscular or sub cutaneous)Injection (intramuscular)	100–200 mg	Every 2 week
<ul style="list-style-type: none">• Parenteral testosterone• Testosterone enanthate or cypionate	Injection (intramuscular)Injection (sub cutaneous)	1000 mg	Every 12 week
<ul style="list-style-type: none">• Testosterone gel	Gel (rubbed into your skin)Gel (rubbed into your skin)	50–100 mg	Daily
<ul style="list-style-type: none">• Testosterone transdermal patch	Patch (stuck on your skin)Patch (stuck on your skin)	2.5–7.5 mg	Daily



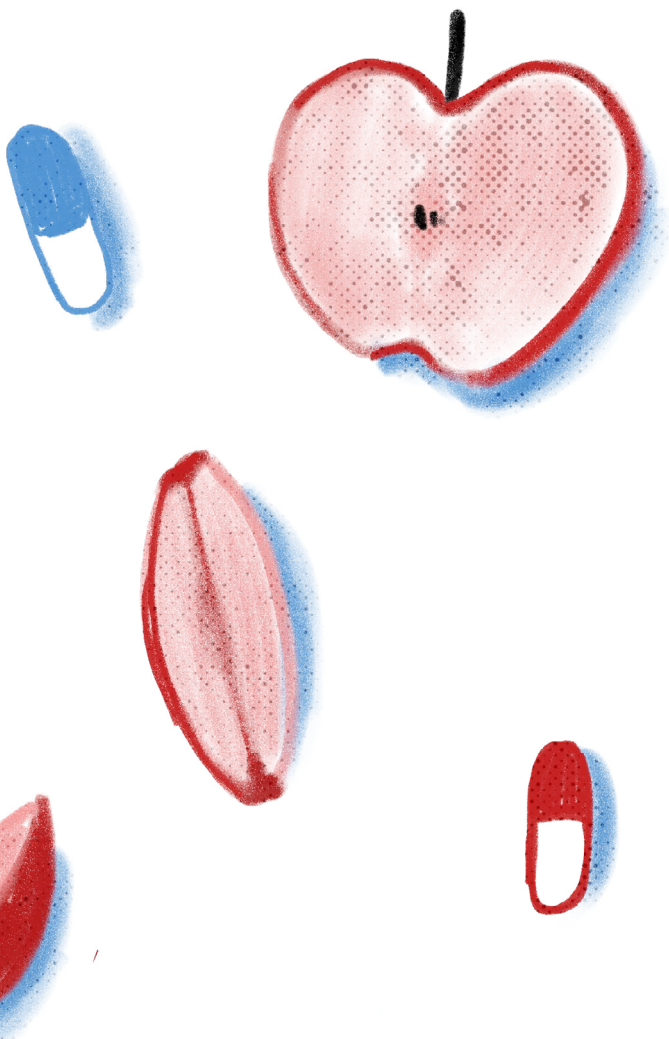
	F	S	S
	2	3	4
	9	10	11
5	16	17	18
2	23	24	25

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WHAT ELSE DO I NEED ONCE I HAVE STARTED TESTOSTERONE?

Once you start on testosterone you will need to have regular physical exams and lab tests. In general, your medical health provider may ask to see you every 3–4 months within the first year and then every once or twice a year after that 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 some 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 feel scary.





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
Testosterone level	To monitor the level of Testosterone in your body	Every 3–6 month in the first year and then 1–2 times every year	400–700 ng/dL
Blood cell count (CBC), especially hematocrit or hemoglobin	To test your blood for disease	Every 3–6 month in the first year and then 1–2 times every year	Upper limit of normal male value if amenorrheic
Lipids, blood sugar, electrolytes	To test your kidney for damage or disease	Every 3–6 month in the first year and then 1–2 times every year	–
Liver function test	To monitor your liver for damage or disease	Every 3–6 month in the first year and then 1–2 times every year	–
Blood pressure	To assess and monitor your risk of heart disease and stroke.	Every 3–6 month in the first year and then 1–2 times every year (or every annual visit)	–
Cardiovascular test	Tests to assess your risk of heart disease, diabetes, hypertension	Based on National Guideline	–
Breast cancer screening	Preventative exam to screen for breast cancer	Annual breast examination and the mammograms as based on National Guideline	–
Cervical cancer screening	Preventative exam to screen for cervical cancer	Based on National Guideline	–
Depression and anxiety	To monitor your mental health as you progress through your hormone therapy	Based on National Guideline	–

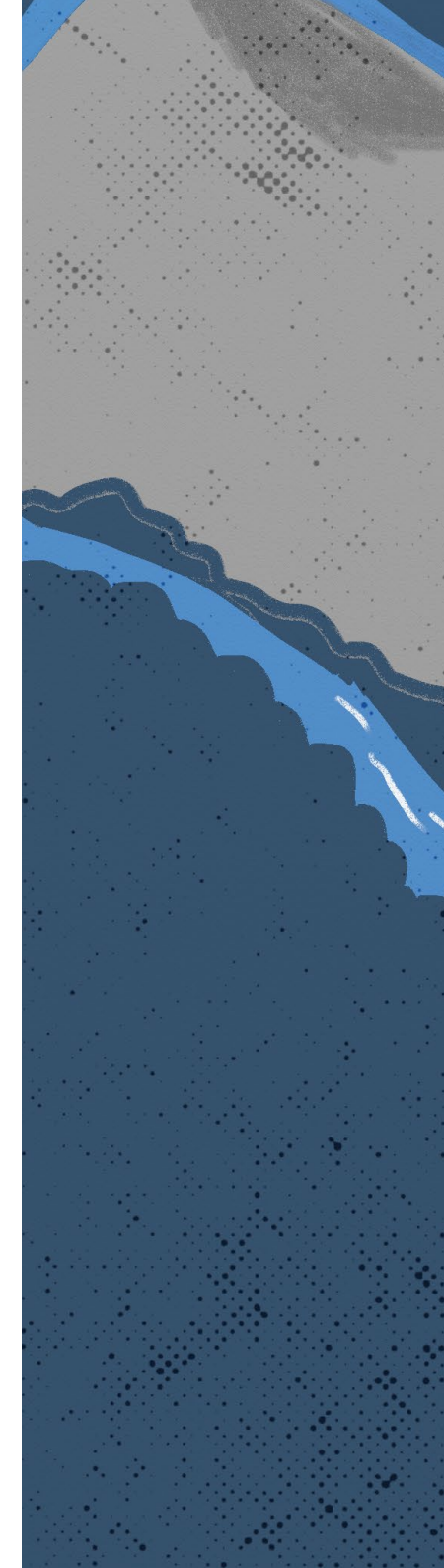
WHAT IF I STARTED TAKING HORMONES AND DECIDE I DO NOT WANT TO ANYMORE?

You may decide that you want to stop taking hormones, if this is your situation it is good to speak with your healthcare 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 testosterone for.

Irreversible Changes: If your voice has deepened or if you experienced thinning hair or baldness, these will NOT be reversible. Also, your clitoris may not decrease back to its original size and your body and facial hair may reduce a little, but it will not go away entirely.

Reversible Changes: Your period will return and you will see changes in the distribution of fat and muscle around your body back to before using testosterone.

Unknown: The effects on fertility (whether you will be able to get pregnant or not) are not well known, you may be permanently infertile (which means you cannot have biological children). If you are thinking about starting a family in the future, you should 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.

The speed and amount your body changes depends on genetics and age; everyone has a different response to hormones. Especially for transgender men, facial hair growth is very related to genetics. If your family is very hairy, it is more likely that you will have more facial hair quicker than those with less hairy families.

If you feel like you are not seeing the changes you want, it is very important to speak with your healthcare 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 most likely need to take hormones for the rest of your life to maintain the physical changes in your body. If you decide to have a gonadectomy to remove your ovaries your dose of testosterone will most likely be reduced, but you'll need to keep taking it to maintain the masculine physical traits. It is important to talk to your healthcare provider about what gender affirming hormone therapy might look like for you throughout your life.

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, you can have 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 to start a family but if you think that you might want to have biological children in the future, it is important to speak with your medical healthcare provider about your options. 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 remove your ovaries 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 health provider to monitor your long-term progress on GAHT, this is usually through an annual check up once you have settled on your established regime.



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 it is important to speak with your healthcare provider about this, so you have the best possible drug regimen and 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 with your healthcare provider on how to take PrEP while you are on hormone to make sure that you are getting the maximum protection from HIV as well as the maximum affects from your hormone therapy.

RESOURCES USED:

1. Vancouver Coastal Health, Transcend TransgenderSupport&EducationSociety and Canadian Rainbow Health Coalition. *Hormones: A Guide for FTMs*. 2006. https://d31kydh6n6r5j5.cloudfront.net/uploads/sites/161/2019/08/hormones_FTM.pdf





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