

RESOURCES

For Advocacy, Support, Guidance, or Financial Assistance:

www.kentuckyhealthjusticenetwork.org/trans-health

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transhealth@khjn.org

Trans Bodies, Trans Selves (Oxford University Press, 2014)

(Resource guide for transgender, gender expansive, and non-binary populations, covering health, legal issues, cultural and social questions, history, theory, and more. It is a place for transgender, gender expansive, non-binary, and gender questioning people, their partners and families, and others to look for up-to-date information on life under the trans umbrella.)

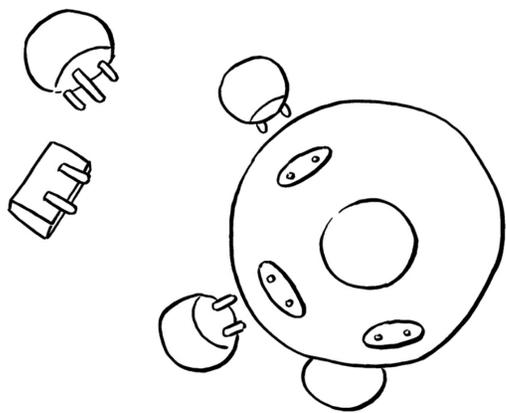
BASICS OF HORMONE THERAPY

(From *Trans Bodies, Trans Selves*, Oxford University Press)

HOW HORMONES WORK

Hormones are chemical messengers that deliver instructions to various tissues and organs in the body. Many hormonal functions have nothing to do with sex or gender. Hormones are produced in glands all over the body, including the thyroid (metabolism), parathyroid (bones), pineal gland (secretes melatonin, which controls sleep/wake “circadian rhythms”), adrenal gland (secretes cortisol and other stress-related hormones), and pancreas (insulin for sugar control). There are many other glands and hormones, some of whose function is still unknown, and probably many that have yet to be discovered.

Hormones work through a system of receptors. A receptor is an area on the outside of a cell (or sometimes in its center or “nucleus”) that is specially designed to “fit” one specific hormone. We can think of hormones as keys and receptors as locks. If, for example, an estrogen molecule tries to attach to a testosterone receptor, nothing will happen. When an estrogen molecule finds an estrogen receptor, it is able to deliver its message to the cell. This message might be to tell breast tissue to grow, skin to become softer, or a brain cell to “feel” a certain way. Hormones are floating around in our bodies in a complex soup of messages that all work in balance and opposition to each other.



PAYING FOR HORMONES

The cost of obtaining hormones includes both the cost of seeing a health care provider and also the cost of the hormones themselves. Affording hormones can be very difficult for those of us who barely get by. “When I first started using hormone replacement therapy, they did not pay for my prescriptions or for the blood work related to them. I was paying entirely out of pocket, and cut down on my food expenses by dumpster diving and stealing food in order to afford transition-related expenses.” Depending on whether we have insurance and what kind of insurance we have, the amount we are personally required to pay may be very high or very low.

Some insurance plans do not cover prescriptions of any kind, whether they are for hormones or other medications. Some companies will pay for hormones knowing that we are transgender and that the hormones are being prescribed for that reason. Other companies specifically exclude any kind of transgender care but will pay for hormone prescriptions if the hormones could be used for other purposes than transitioning. For those of us who have insurance that covers hormones, we often still have to pay part of the cost ourselves. This is called the copay. There may also be a deductible, which is an amount of money that we have to pay ourselves in that particular year before the insurance company will start paying any portion of our prescriptions.

Hormones can vary significantly in cost depending on where we buy them. With a prescription from a health care provider, we may go to a local pharmacy, discount pharmacy, or compounding pharmacy, or send the prescription away to a mail-order pharmacy. Some insurance companies even have their own mail-order pharmacies. In many cases, large pharmacy and big-box warehouse-type chains offer deep discounts on generic medications.

Some of us attempt to save costs by obtaining our prescriptions from overseas, Canadian, or Mexican pharmacies. In some cases, there may be significant savings. In other cases, the savings are minimal and not worth the hassle of waiting months at times for our medicines to clear customs. Laws may govern how much or what kind of medicine can be imported. If you do choose to order from an international pharmacy, be sure to do your homework. Ask around and learn about what pharmacies other transgender people have used. Do your best to be sure you are getting medicine that is not mislabeled, expired, tainted, or falsified.

INFORMED CONSENT

*Laura A. Jacobs, LCSW, is a psychotherapist, activist, and presenter in the New York City area focusing on LGBTQ and sexual/gender minority communities, on the board of directors for Callen-Lorde, and is completing and pursuing publication of her own book, *Many Paths: The Choice of Gender*.*

Informed consent is about empowerment. The prior Standards of Care, as established by the World Professional Association for Transgender Health (WPATH), required we adhere to a very specific definition of trans identity: an individual was expected to assert that they had always identified as the “other” gender, to be willing to live as the “other” gender before commencing medical interventions, to present in ways that were conventional for the “other” gender, and to be heterosexual as the “other” gender to receive medical care.

Informed consent arose to combat these authoritarian forces. Developed first at the Tom Waddell health clinic in San Francisco, and spreading in the early 2000s to LGBTQ Health Centers like Callen-Lorde in New York City, Fenway Health in Boston, and the Mazzoni Center in Philadelphia, informed consent is a model of care that redefines the relationship of provider and client as one of equals where the individual becomes a partner in determining the course of their own treatment, aware of the benefits and risks.

The development of Informed Consent represents a major piece of trans activism. The effectiveness of this movement is made clear when we see that many of the basic principles of Informed Consent have been incorporated into the most recent version of the WPATH Standards of Care.

Hormones and hormone receptors. Hormones are controlled through feedback. The pituitary gland is the master gland of the body, in the brain just behind the eyes and the nose. The pituitary sends messages out to the gonads (testicles and ovaries), telling them when and how much estrogen or testosterone to make. When the levels of estrogen or testosterone reach a certain point, the pituitary receives feedback about how successful it has been, and shuts off its messages to the gonads, so that hormone levels gradually fall until they get low enough to trigger the pituitary to turn on again.

The hormones we typically take as trans people—estrogen, testosterone, and progestogens—are considered sex hormones because they affect our sexual and reproductive drives and capacity. All people have all of the sex hormones swimming in their bloodstream. It is the amounts of each of these hormones in relationship to one another that give us the physical characteristics we have. Sex hormones have multiple functions, not all of which are related to sex or gender.

Although estrogen is traditionally thought of as the “female hormone,” all males have a certain amount of estrogen. The normal range of estrogen levels for cisgender males has a small amount of overlap with the normal range of levels for cisgender females. Everyone, including males, needs estrogen. Estrogen is very important for bone health, and males who have problems with their estrogen receptor develop osteoporosis at a young age. Testosterone is also present in everyone. Cisgender men typically have higher levels than cisgender women, but cisgender women produce testosterone, too, and it helps them with building muscle and maintaining sex drive. Hormones do not exist in a vacuum; they interact with each other. If you develop uncomfortable symptoms while on hormone therapy, it is important for both you and your provider to keep an open mind about possible causes, including other hormone systems, such as the thyroid, which may have been set off balance when starting hormone therapy.

BASICS OF HORMONE THERAPY

To explain the effects of hormones, we will categorize them into masculinizing or feminizing. The intention is not to further perpetuate the gender binary or create rigid gender divides. The truth is that there are two ends of the spectrum, and we will choose a certain hormone regimen depending on which direction we want to move.

In general, there has been little (if any) research comparing one regimen to another, or testing the safety or effectiveness of any particular regimen. Current recommendations are based on a combination of expert opinions as well as information based on other ways that hormones are used, such as in menopause, contraception, and testosterone deficiency.

Hormone Protocols for Prescribers

- Endocrine Society Guidelines for Endocrine Treatment of Transsexual Persons
- Tom Waddell Health Center Protocols for Hormonal Re-assignment of Gender
- TransLine Medical Consultation Service Transgender Lab and Medication Protocol
- UCSF Center of Excellence for Transgender Health Primary Care Protocol
- Vancouver Coastal Health Guidelines for Endocrine Therapy for Transgender Adults
- World Professional Association for Transgender Health (WPATH) Standards of Care

Many people are eager for hormonal changes to take place rapidly. It is important to remember that how much and how fast our bodies change depends on many factors, including genetics, the age we are when we start taking hormones, and our overall state of health. How fast and how much our bodies change is more influenced by these things than by how high of a dose we are taking. Consider the effects of hormone therapy as a second puberty. Puberty normally takes several years for the full effects to be seen. Taking higher doses of hormones will not necessarily bring about faster changes, but it could endanger our health. Because everyone is different, one person's medicines or dosages may vary widely from that of their friends, or what is in books or online.

ENSURING WE ARE TAKING THE PROPER AMOUNTS

Like anyone seeking any kind of changes to one's body, we may be drawn to treatments that promise to deliver amazing results, such as high doses of hormones or free silicone injections. In many cases, these treatments are dangerous and can be life threatening. Many of us want to maximally feminize or masculinize our bodies and are willing to do this at almost any cost. However, the cost can be steep. One important myth to dispel is that taking higher than prescribed doses of hormones will increase the speed of physical transition. This has not been shown to be true. Instead, taking more than normal prescription doses adds nothing to the speed of transition and causes unwanted side effects.

Harm reduction models of treatment are more frequently used with clients who are already using hormones, regardless of the source of those hormones. For example, if a client is seeking medical care and has been taking street hormones for a period of time, the provider who follows a harm reduction model is not likely to prevent the trans person from continued access to hormones. The provider recognizes that it may be in the best interest of the client to continue taking hormones, and that in reality, having access to hormones from a provider may be safer than the use of street hormones. —*lore m. dickey, PhD*

Taking high doses of hormones has a number of risks. Estrogen in high doses can cause blood clots, anxiety, migraines, weight gain, constipation and bloating, and immune system disorders ranging from severe allergies to autoimmune conditions such as lupus or rheumatoid arthritis, where the body's defenses attack itself. There are injectable street hormones that contain a month's worth of estrogen and progesterone. Some of us inject this as often as every day and suffer from migraines, muscle aches, nervousness, and insomnia. There are myths that all estrogen leaves the body after ejaculation or orgasm, but this is not true. Testosterone in high doses increases the risk of developing dangerously high cholesterol levels or dangerously thick blood (also known as a high hemoglobin or hematocrit). Either of these conditions can lead to strokes, heart attacks, and kidney or eye damage. In addition, testosterone in excess is converted to estrogen in the body, which may cause menstrual cramping or a return of periods.