

WHY SHOULD A TRANSFEMININE PERSON CONSIDER PROGESTERONE?

Curated by [CJ Bellwether](#)

(Note this is in reference to micronized body identical Progesterone only, medroxyprogesterone should be avoided, see at the bottom)
Below information based on current knowledge: Jan 2020

- Helps with sleep cycle, deeper sleep, easier to stay asleep.[#]
- Plays a part in breast development, including ductal development and modest lobuloalveolar development (alveolar bud formation or ductal sidebranching).[20][21][25]
- Helps develop feminine areola in breast development, size and darkening.[#]
- Allows for more rapid feminization of transfeminine people as it reduces the effects of DHT.[#]
- Skin elasticity, firmness and circulation, helps with anti-ageing, prevents wrinkles, skin is softer, youthful - healthy glow that pregnant women are referred to having.[62]
- When taken rectally at night time it works very well as a GnRH inhibitor greatly reducing Testosterone levels in transfeminine people, and can be used as an alternative AA (Anti Androgen) to other drugs with undesirable side effects such as spironolactone / cyproterone acetate etc.[#]
- Plays a role in social bonding, higher levels of progesterone are found to lead to willingness to help other people even at your own expense. [#]
- Builds/maintains strong bones - only progesterone helps building new bone, estrogen does not. (maintaining bones involves removal of old bone by osteoclast cells, and progesterone stimulates osteoblasts which build new bone)[#]
- Reduces anxiety, attaches to the same receptors as cortisol with greater affinity.[#] "progesterone has sedative effects through its intermediate metabolites" [#][#2]
- Stronger connection between craving/reward brain and decision making - study results suggested it enhanced cognitive control - so easier to quit habits. Shown to reduce craving and feeling of stimulation on cocaine.[79][80][81]
- Protects against breast cancer (and endometrial cancer for cis women)[#][#2]
- Muscle relaxant - (so can lead to constipation at high doses).
- Increases core body temperature.[35]
- Reduces muscle spasms.

- Acts as an anti-inflammatory agent, regulates immune response.[#]
- Reduces gallbladder activity.[86]
- Normalizes blood clotting and vascular tone, zinc and copper levels, cell oxygen levels, and use of fat stores for energy.
- Helps delay heart disease.[#]
- Reduce risk of DVT.[#][#2]
- Plays an important role in the signaling of insulin release and pancreatic function, and may affect the susceptibility to diabetes or gestational diabetes [88][89]
- Increases salt desires when high - this reverses when in withdrawal.
- Plays a role in increased female libido / sexual behaviour - increases lordosis behaviour.[63][#]
- Higher progesterone has been shown to correlate in women and men to higher propensity towards homoerotic behaviour.[64][65][66][67][#]
- Plays a role in the nervous system - neural stimulation.[68]
- Neuroregeneration - helps stimulate development of normal brain cells, and protective effect on damaged brain cell tissue - makes you less susceptible to brain damage.[70][71][72][76]

WHAT ABOUT PHYSICAL FEMINIZING EFFECTS?

As many doctors like to tell transfeminine people, there is no study yet to show whether progesterone has any physical “feminizing effect” or not on trans women. So there is no scientific consensus at the moment and some doctors will cite this as a reason to deny transfeminine people progesterone. If you run into this trouble, I suggest you use all the benefits listed above as alternative reasons to help convince your doctor why you, a woman, should have access to a normal female hormone, that plays a huge part in normal female physiology and is very inexpensive to prescribe.

It’s important to remember that while there is no study showing it conclusively does help physically feminize trans women, there is no study to show it doesn’t either. However the belief that trans women want hormones only to *look* more like women is a deeply misguided understanding of what trans women want out of HRT.

HOW MUCH SHOULD SOMEONE TAKE AND HOW?

The most common and safest dosage is 100 or 200mg of Micronized Body Identical Progesterone taken rectally at night time just before bed, taken everyday, not cycled.

It might make you sleepy and woozy (depending on how high up your rectum it goes - or if there is an anal fissure) so dont take it before driving or anything else where you need full sense of your faculties - but it will definitely make you very woozy if you take it orally rather than rectally as it acts as a sedative. If you push it just 1-2 inches past your sphincter - to the second knuckle of a finger, you should get little to no drowsy effect, if you push it higher up with a longer device you could however move it to the upper rectum where you will get the drowsy effects.

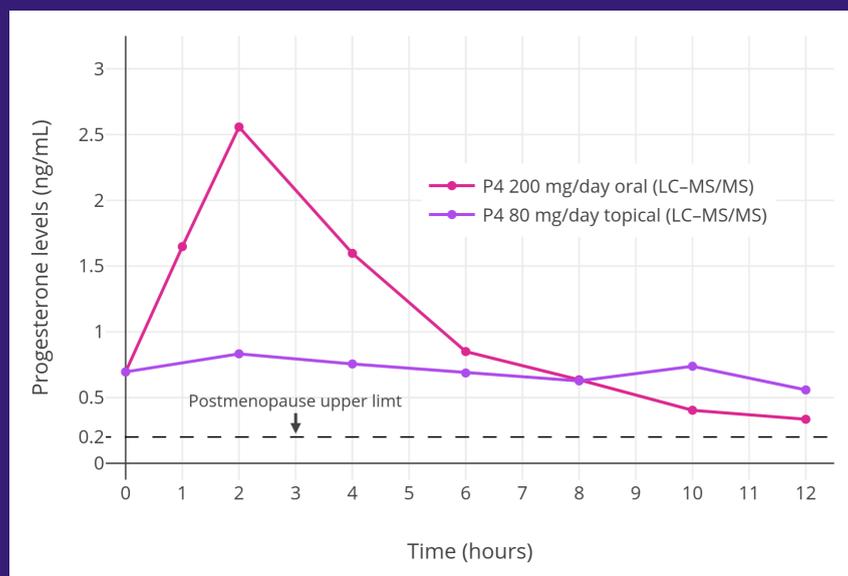
NOTE: IF YOU TAKE IT ORALLY, PROGESTERONE ACTS AS A SEDATIVE, IT **WILL**** MAKE YOU ****VERY**** DROWSY / WOOZY LIKE YOU ARE DRUNK.**

Just wanted to make that clearer. It is an alarming thing to experience if you dont know its about to happen. It can be very impairing. Only take it orally if you are about to sleep or want to be sedated, but for hrt purposes i would still suggest taking it rectally instead.

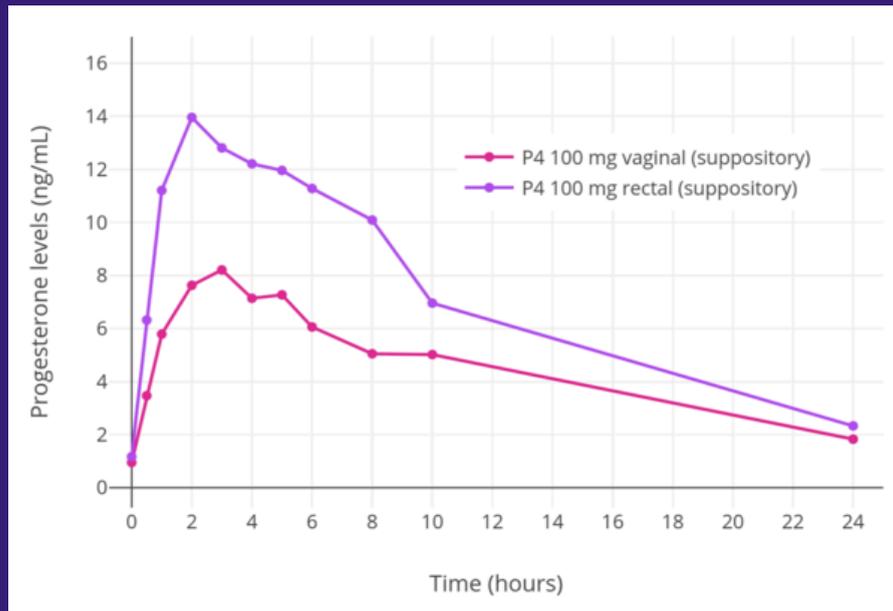
WHY RECTALLY?

By taking Progesterone rectally it bypasses first pass through the liver so more of it reaches your bloodstream by up to 8-10 times and lasts throughout 24 hours while oral runs out after ~12 hours. See below diagrams for reference.

Oral 200mg (pink line)



Rectal 100mg (purple line)



WHEN SHOULD SOMEONE START TAKING PROGESTERONE?

At the moment the best knowledge for development is to not take progesterone immediately but to wait until breast growth is at tanner stage III, once breast growth has expanded from just the breast bud to full mound. This is over concerns that progesterone may have the potential to limit breast development if taken too early in puberty.

SAFETY NOTICE

If you choose to cycle your progesterone ie take it in a regimen that mimics a cis female hormone cycle be aware that you are risking very negative mental health affects as you will be inducing PMS like symptoms from progesterone withdrawal. To a transfeminine person early in their transition this can be very dangerous and lead to suicide ideation

There is no proven scientific benefit from cycling progesterone.

It is also reported that a small amount of transfem people experience bad mental health effects from taking progesterone. Some of these are self-attributed to the fact that progesterone increased their maternal urges and desire to have children leading to mental health spirals.

As ever when adding a new hormone into your regimen, give yourself a gap between introducing each new hormone to help you more clearly spot if you have an allergic or adverse reaction and what is causing it.

Be careful when starting progesterone, and if you do find it has an extreme negative affect on your mood that does not stabilize quickly, consult with your HRT specialist about lowering your dosage down before taking you off it completely.

ALLOPREGNANOLONE: BAD MENTAL REACTION TO PROGESTERONE

So interestingly, progesterone is broken down by 5 α -reductases (enzymes) into Allopregnanolone which is the neurosteroid, with strong anti-inflammatory properties, that gives Micronized Progesterone HRT so many of its benefits. Wikipedia has this to say on an interesting property of Allopregnanolone:

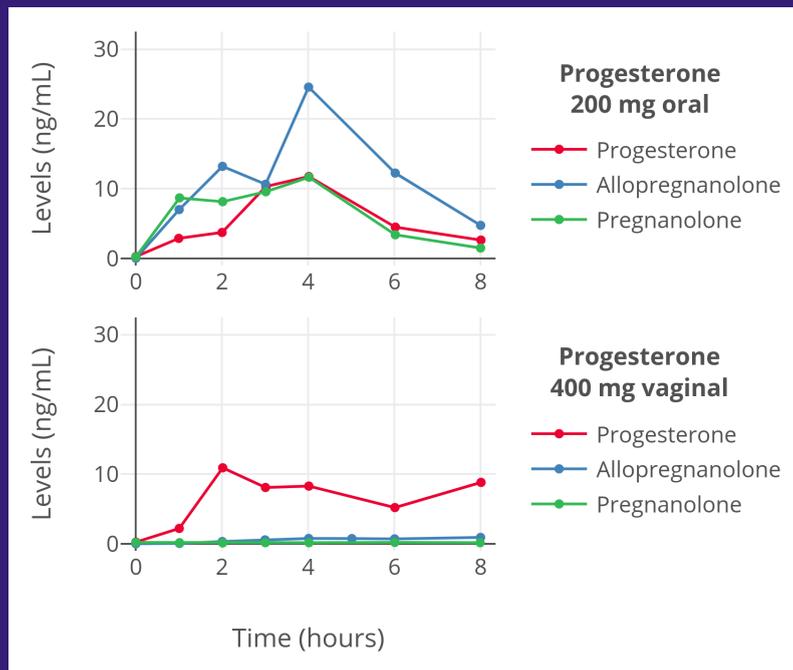
“Allopregnanolone possesses a wide variety of effects, including, in no particular order, antidepressant, anxiolytic, stress-reducing, rewarding,^[9] prosocial,^[10] antiaggressive,^[11] prosexual,^[10] sedative, pro-sleep,^[12] cognitive, memory-impairment, analgesic,^[13] anesthetic, anticonvulsant, neuroprotective, and neurogenic effects.^[2] Fluctuations in the levels of allopregnanolone and the other neurosteroids seem to play an important role in the pathophysiology of mood, anxiety, premenstrual syndrome, catamenial epilepsy, and various other neuropsychiatric conditions.^{[14][15][16],,}

However interestingly if your allopregnanolone reaches luteal phase levels (1.5-2 nmol/L)..

“Increased levels of allopregnanolone can produce paradoxical effects, including negative mood, anxiety, irritability, and aggression.^{[17][18][19]} This appears to be because allopregnanolone possesses biphasic, U-shaped actions at the GABA_A receptor – moderate level increases (in the range of 1.5–2 nmol/L total allopregnanolone) inhibit the activity of the receptor, while lower and higher concentration increases stimulate it.^{[17][18]} This seems to be a common effect of many GABA_A receptor positive allosteric modulators.^{[14][19]} In accordance, acute administration of low doses of micronized progesterone (which reliably elevates allopregnanolone levels) has been found to have negative effects on mood, while higher doses have a neutral effect.^{[20],,}

RECTAL PROGESTERONE AND ALLOPREGNANOLONE

By taking progesterone rectally you also reduce the amount that is converted to allopregnanolone (either fully or partially) which should avoid bad mental health effects that can occur from oral dosing.



When you take it orally a large amount is converted to allopregnanolone in the liver.

When you take it in your lower rectum (just an inch or so past the sphincter) you will have far less conversion to Allopregnanolone as most of the progesterone will transfer straight into your bloodstream - with only some of it being picked up by the portal vein and taken to the liver. If you push the pill higher up you may find you get more allopregnanolone. Though as of yet there is no study to show exactly how much ends up as allopregnanolone when taken rectally, and as said, this may fluctuate depending how high up the pill is inserted, and movement of the oil (the higher it gets the more will be converted as access to the portal vein increases)

From Wikipedia: Progesterone is delivered directly into the circulation when it is absorbed by the lower portion of the rectum and transported by the inferior and middle rectal veins.^[17] Conversely, if it is absorbed by the upper portion of the rectum, progesterone is subject to hepatic first-pass metabolism due to entry into the hepatic portal system via the superior rectal vein.^[17] As such, although rectal administration is a parenteral route, it may still be subject to some first-pass metabolism similarly to oral progesterone.^[17]

But importantly for about a third of cis women, when their allopregnanolone levels are in luteal phase levels (either naturally or from progesterone based medication), they report medium to heavy PMS symptoms (25% medium, 8-9% heavy). This issue seems to be genetic and may explain why some trans women report similar PMS symptoms from oral progesterone. [#]

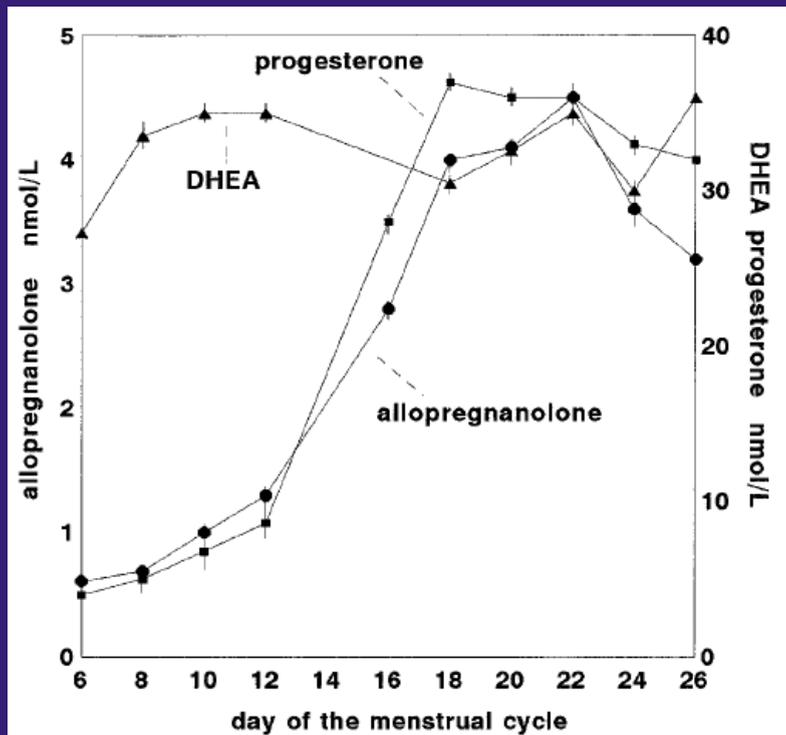
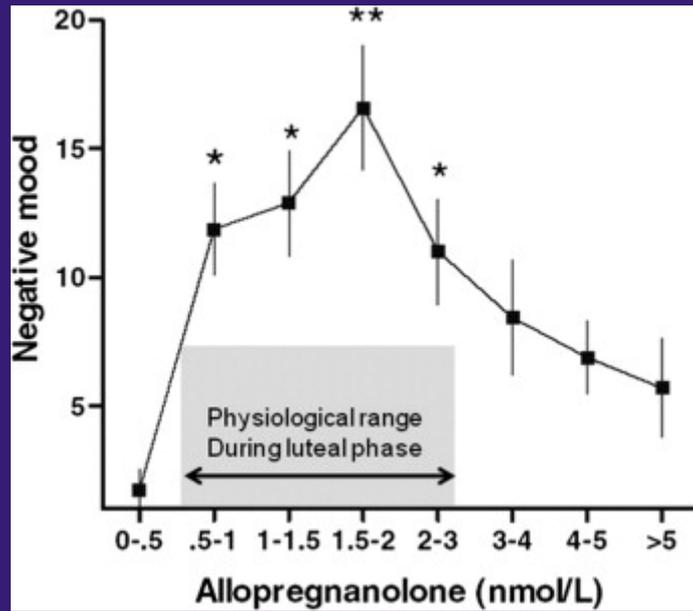


FIG. 2. Allopregnanolone (●), P (■), and DHEA (▲) levels according to the phase of the menstrual cycle.

The above chart shows the normal allopregnanolone levels compared to progesterone for a cis woman's hormonal cycle (allo measurements on the left side, against progesterone measurements on the right). Note the chart is in nmol/L in comparison to previous charts ng/mL.

However lower allopregnanolone levels in the follicular phase (<1.5nmol) are shown to have the contradictory effects including being responsible for many of the positive mental health effects of progesterone listed at the beginning of this document.

Until there is further studies on rectal administration of micronised progesterone and how much is converted to allopregnanolone if its in the higher rectum (currently vaguely referred to by wikipedia as “some”) the safest option is to place it in the lower rectum.

OTHER DRUGS THAT AFFECT PROGESTERONE

FINASTERIDE / DUTASTERIDE

Both Finasteride and Dutasteride act to inhibit the 5 α -reductase enzymes that produce DHT from Testosterone, which is why they are often prescribed to trans women with hair loss issues.

However in doing so, they also block those enzymes from breaking down progesterone to allopregnanolone.^[2] Progesterone and allopregnanolone occur in differing levels naturally in both amab and afab people as an important part of our biology. And low levels of allopregnanolone has been shown to lead to extreme depression and anxiety, and risk of long term neurodegenerative disease issues like alzheimers.

So please be aware taking either Finasteride and Dutasteride with or without added progesterone HRT, may cause negative mental health effects.

Because of the blocking effect of these two drugs, people taking Finasteride or Dutasteride that then take progesterone HRT are very likely to not feel much, if any mental, sedative, or any other effects that allopregnanolone causes.

Anyone considering taking Progesterone, either orally or rectally while already taking Finasteride or Dutasteride I would strongly urge caution to them and to talk to a professional HRT specialist due to the known interaction between the medications.

While Finasteride and Dutasteride will block the break down of any progesterone to allopregnanolone that passes through your liver - what that means regarding excess stress to your liver (especially if you are taking the progesterone orally) or how much of the progesterone will move directly to your bloodstream i can't say. At the very least id caution about taking progesterone orally when on either of these medications.

This all being said, Progesterone is noted to inhibit DHT conversion itself by competing in the liver for the enzyme that does that conversion and also works as an anti-androgen overall.

BUT sadly there is no study to show comparison effectiveness of Progesterone's own DHT inhibition to Finasteride/Dutasterides very strong DHT blocking ability. So on the very sensitive topic of hair regrowth / loss, this would have to be a choice dependent on someones own balance of needs, regimen and issues - or if not possible now, a step that could be projected in the future as transition progresses.

So if you are on Fin or Dut and are struggling with noticeable negative mental health effects from them, or you've been put on it not for hair loss reasons, switching to progesterone taken orally might be one option to consider that alleviates the mental issues and stop long term risk while still limiting DHT and further overall T production, or can be taken rectally and work as a stronger anti-androgen overall.

WHAT ABOUT OTHER NEGATIVE HEALTH CONCERNS?

There are several negative health concerns that some doctors attribute to progesterone, referring to a WPATH study from 2000 as a reason for denying micronized body identical progesterone to trans women.

BUT the study they use refers to ALL progestins and not just body identical progesterone.

It has since been shown [\[#\]\[#2\]](#) with consensus by the British Menopause Society that micronized body identical progesterone does not cause any of these issues and they are only from synthetic composite progestins such as medroxyprogesterone acetate. The fact that many doctors continue to still willfully attribute seriously bad side effects to progesterone in an attempt to scare people off it is pretty telling.

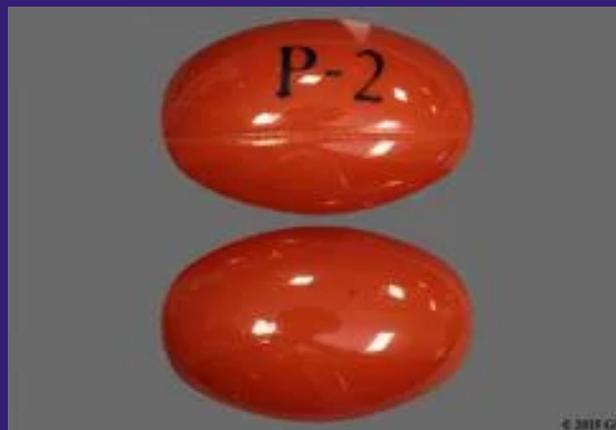
The issues wrongly attributed to body identical progesterone are:

- Breast Cancer
- Anxiety, Irritability
- Cardiovascular risks
- Insulin Resistance
- DVT - Deep Vein Thrombosis

Again to be clear, the above issues were found to be caused by medroxyprogesterone / synthetic progestins in the studies, and since, other studies have shown bio-identical or body-identical progesterone does not.

**BELOW - Example of Micronized Bio/Body Identical Progesterone
Oral/Vaginal Pill**

(note: while the box/instructions may state they are either oral or vaginal pills they CAN be taken rectally)



Easy Identify: Pill has a gelatin outer layer (shiny/smooth/plastic-like), if pierced or cut, inside there will be creamy liquid substance. if it is 200mg it will be ovule shaped like the pictures above, if 100mg it will be spherical.

**BELOW - Example of Micronised Bio/Body Identical Progesterone
Suppository / Pessary.**



Easy Identify: Clear large size compared to oral pills, “torpedo shape” or other insertion aiding shape. No outer layer, smooth feel, solid but not powdery. Progesterone has been bound to proteins to create a solid substance that will absorb slowly after insertion.

DIY Progesterone Pessary may come in “odd” or “fun” disguised shapes in order to avoid customs worries.

If unsure, consult with the provider.

BELOW - Examples of Medroxyprogesterone (to be avoided)



Easy Identify: Pill is pressed powder, no outer layer. If broken apart it will crumble to powder, no liquid.

Best advice to help tell the difference, if its in a gel capsule its likely to be Micronized Progesterone, if its a powder tablet then its a synthetic progestin.

Unfinished List of Micronized Progesterone Brands

(Oral and/or Vaginal gel capsules CAN both be taken RECTALLY without need to break down the pill before hand)

USA: Prometrium (oral)

UK: Utrogestan (vaginal/oral), Cyclogest (pessary)

If a pill is simply listed as generic 100mg or 200mg progesterone, consult pictures above, but if it's in a gel capsule again, it's almost certainly micronized progesterone.

Confirmed brands of micronized progesterone from other countries (apologies to not have current info on which brands are made in which countries).

Algest
Aurich
Biogest
Dubagest
Endogest
Ets
Fulgest
Gestafine
Gestofit
Hernmp
Hormorin
Lupigest
Microgest
Microprogesta
My Prog
Naturogest
Pro-9
Profine
Progeffik
Prometrium
Prostagen
Puregest
Strone
Susten
Utrogestan
Vageston

