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PATIENT GUIDE

DHEA and pregnenolone
what the research supports

DHEA and pregnenolone are hormones the body makes from cholesterol, sold as supplements and compounded as capsules. The trials show a narrower set of uses than they are usually sold for.

HORMONES	MADE BY	FORMS	FDA APPROVED	SOURCES
DHEA, pregnenolone	Adrenal glands	Capsule or vaginal	Vaginal DHEA only	31 · PMID linked

§ 01

Overview

DHEA and pregnenolone are hormones your own body makes, sold in capsules on the promise of restoring what age takes away. The level does fall with age: in 981 men and 481 women aged 11 to 89, DHEA sulfate peaked at a mean of 3,470 ng/mL at ages 20 to 24 in men and 2,470 ng/mL at ages 15 to 19 in women, while over 70 the means were 670 and 450 ng/mL.[1] Pregnenolone is the first steroid the body makes from cholesterol and the starting point for every other steroid hormone.[2]

What the research supports is narrower than the range of products suggests. One DHEA medicine carries FDA approval, a 6.5 mg insert used in the vagina for painful sex after menopause.[3] In adrenal insufficiency, where the adrenal glands stop making DHEA, replacement improved well being, mood and sexuality in a randomized trial of 24 women.[4] Outside those two settings most trials came back null, and the sections below give the numbers.

6.5 mg	**The dose of the one FDA approved DHEA medicine.** Vaginal prasterone is approved for moderate to severe pain at sexual activity due to menopause.[3]
0.21	**The quality of life effect size in adrenal insufficiency.** A meta analysis of 10 randomized trials in women found 0.21 (95 percent confidence interval 0.08 to 0.33), which its authors called small and perhaps trivial.[5]
2 years	**The longest placebo controlled trial in older adults.** In 87 men and 57 women with low DHEA sulfate, two years of DHEA changed neither body composition, physical performance nor quality of life.[6]
4 trials	**All the controlled trials of 7 keto DHEA and body weight.** A systematic review screened 686 studies and found four. Half reported a significant fall in body weight.[7]

§ 02

What DHEA and pregnenolone are

All three sit near the start of the body's hormone pathway, so none acts as a finished hormone on its own.

DHEA and DHEA sulfate

DHEA and DHEA sulfate are the major circulating adrenal steroids and the raw material for sex hormone production outside the ovaries and testes.[8] Most circulates as the sulfate, which is what a blood test measures and which holds steady: in weekly samples from four healthy men it varied by a mean coefficient of variation of 19 percent, with no monthly, seasonal or annual rhythm.[1] Prasterone is the drug name for DHEA, and its FDA approved label calls it an inactive steroid the body converts into active androgens or oestrogens.[3]

Pregnenolone

Pregnenolone is made from cholesterol in the adrenal glands, the ovaries and testes, and the brain, and progesterone, DHEA, cortisol and the sex hormones all follow from it. It is usually described as a precursor rather than an active hormone, though targets for pregnenolone itself have been found in the brain.[2]

7 keto DHEA

7 keto DHEA, sold as 3 acetyl 7 oxo DHEA, is a naturally occurring derivative of DHEA that differs from it in a way that matters. Isotope ratio mass spectrometry in volunteers given a single dose confirmed that it is not converted back into DHEA,[9] and in 22 healthy men, doses up to 200 mg a day for 28 days left testosterone, dihydrotestosterone, oestradiol, cortisol, thyroxine and insulin in the normal range.[10] That is why it is sold as a version without the androgenic and oestrogenic effects of DHEA. Neither it nor oral DHEA nor pregnenolone is an FDA approved medicine, so those capsules are supplements or pharmacy compounded preparations.[11]

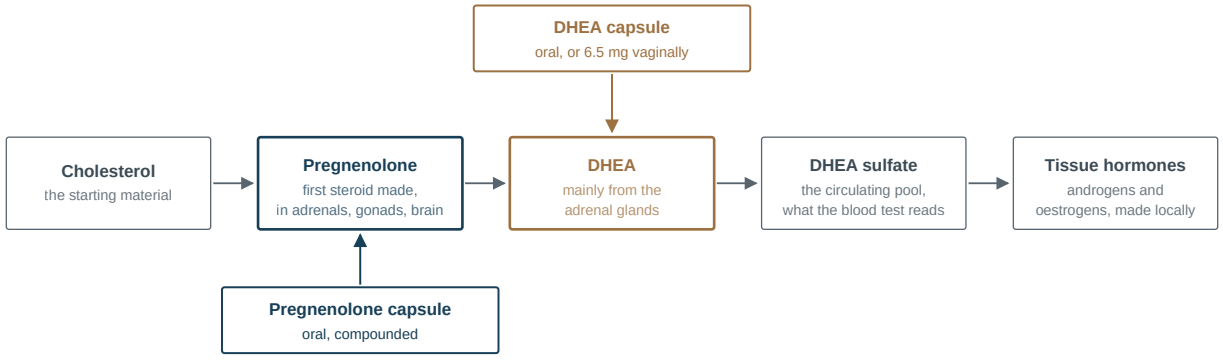
THE THREE COMPOUNDS SIDE BY SIDE

	DHEA	PREGNENOLONE	7 KETO DHEA
Where the body makes it	Mainly the adrenal glands[8]	Adrenal glands, ovaries and testes, brain[2]	From DHEA in the body's own tissues[9]
Becomes androgens and oestrogens	YES[3]	Yes, by way of DHEA[2]	NO and not back to DHEA[9]
FDA approved product	Vaginal insert only[11]	NONE[11]	NONE[11]

§ 03

How they work

The body builds every steroid hormone from cholesterol along one pathway. Cholesterol becomes pregnenolone, pregnenolone becomes DHEA, and most DHEA is sulfated and held in the blood as DHEA sulfate.[2][8] Individual tissues then take DHEA and finish the job themselves, turning it into androgens or oestrogens according to which enzymes they carry. The FDA approved label for vaginal prasterone states that prasterone is an inactive steroid converted into active androgens or oestrogens, and that its mechanism in vulvar and vaginal atrophy is not fully established.[3]



Both are precursors, so what they do depends on what each tissue converts them into. DHEA sulfate is the form that circulates in quantity and the one measured in blood, and it falls steadily from the early twenties onward.[1] Prasterone is described on its FDA label as an inactive steroid that is converted into active androgens or oestrogens, which is why its effects differ from one tissue to the next.[3]

Because the conversion happens inside the target tissue, the same capsule can do different things in bone, skin, brain and breast. In a pooled analysis of four randomized trials in 295 women and 290 men aged 55 and over taking DHEA for 12 months, women's testosterone rose by 18.6 micrograms per decilitre and their oestradiol by 8.7 pg/mL, while men's oestradiol rose by 4.8 pg/mL.[12] Those rises produce both the effects people look for and the side effects in section 07. Pregnenolone works through other products, raising allopregnanolone, which enhances the GABA type A receptor response, and pregnenolone sulfate, which modulates the NMDA receptor upward.[13] Those receptors are why it has been studied in schizophrenia, bipolar depression and chronic pain rather than as a general tonic.

KEY POINT

A precursor only does what the tissue converts it into, so the useful question is whether your own production has failed. Replacement helps most where the adrenal glands have stopped making DHEA,[5] and in people whose adrenal glands work normally, two years of DHEA produced no change in body composition, physical performance, insulin sensitivity or quality of life.[6] A blood level, read together with your history, is where we start.

§ 04

What the research shows

The evidence is lopsided. One narrow use has phase III trials and an FDA approval behind it, one clinical condition has a modest body of randomized evidence, and the uses these products are mostly bought for have been tested and have not held up.

What the evidence supports

Vaginal DHEA for painful sex after menopause. In a phase III randomized, double blind trial, 325 women took 6.5 mg of DHEA in the vagina daily and 157 took placebo for 12 weeks. Against placebo, parabasal cells fell by 27.7 percent, vaginal pH by 0.66 of a unit, pain at sexual activity by 0.36 of a unit and dryness by 0.27 of a unit, and serum steroid levels stayed in the normal postmenopausal range.[14] On trials of this design the FDA approved it.[3 11]

DHEA replacement in adrenal insufficiency. In a double blind crossover trial, 24 women took 50 mg of oral DHEA each morning for four months and placebo for four months. DHEA brought their low DHEA, DHEA sulfate, androstenedione and testosterone into the normal range, improved well being, depression and anxiety scores, and increased sexual thoughts, interest and satisfaction.[4] Pooling 10 randomized trials gave a quality of life improvement of 0.21 (0.08 to 0.33), with a small benefit for depression and none for anxiety or sexual well being.[5] In the largest single trial, 106 adults with Addison's

disease took 50 mg daily for 12 months: femoral neck bone loss was reversed, lean mass increased and one well being subscale improved, with no benefit for fatigue, cognition or sexual function. [8] The Endocrine Society suggests a six month trial for women with primary adrenal insufficiency and low libido, depressive symptoms or low energy despite otherwise optimised replacement, monitored with a morning DHEA sulfate level, grading each suggestion as weak with low quality evidence. [15]

Bone in older women. Pooling four 12 month trials in 295 women and 290 men aged 55 and over, women gained 1.0 percent bone density at the lumbar spine and 0.5 percent at the trochanter and held their total hip density, while men gained none.[12] In the DHEAge study, 280 healthy people aged 60 to 79 took 50 mg daily for a year, and bone turnover, most libido measures and several skin measures improved selectively in the women over 70. [16]

Pregnenolone in specific conditions. In 120 people with schizophrenia given pregnenolone or placebo for eight weeks, functional capacity improved over placebo (p = 0.03) while the cognitive composite score did not change.[13] In 80 adults with bipolar depression, pregnenolone titrated to 500 mg a day for 12 weeks gave a significant treatment by week interaction on the clinician rated depression scale (p = 0.025) and remission in 61 percent against 37 percent on the self report scale, though not on the clinician rated one. [17] In 94 veterans with chronic low back pain, four weeks of pregnenolone improved daily pain ratings by 0.56 of a point over placebo (p = 0.02). [18]

7 keto DHEA and resting metabolic rate. In a randomized, double blind crossover trial, 40 overweight adults on a calorie restricted diet took 7 keto DHEA, a combination product or placebo for seven days each. Resting metabolic rate fell 3.9 percent on placebo and rose 1.4 percent on 7 keto DHEA (p = 0.001).[19] The trial lasted a week and did not measure body weight.

What is not yet known

Whether DHEA does anything for healthy ageing. The two year trial in 87 men and 57 women with low DHEA sulfate found no significant effect on body composition and no change in peak oxygen consumption, muscle strength, insulin sensitivity or quality of life; women gained bone density at the ultradistal radius.[6] A meta analysis of 25 placebo controlled trials in 1,353 elderly men found a reduction in fat mass with a standardised mean difference of 0.35 (95 percent confidence interval 0.05 to 0.65) that disappeared once the rises in testosterone and oestradiol were accounted for, and no effect on lipids, blood sugar, bone health, sexual function or quality of life. [20] A Cochrane review of DHEA for cognition in healthy older people found three usable trials and no benefit; in one, DHEA was associated with worse visual memory recall after a stressor (p < 0.01). [21]

DHEA for postmenopausal women whose adrenal glands work normally. A meta analysis of 23 randomized trials in 1,188 such women found no significant improvement in libido or sexual function (standardised mean difference 0.35, 0.02 below zero to 0.73, p = 0.06) and no significant effect on serious adverse effects, lipids, blood sugar, weight or bone density, at low confidence.[22] A 52 week trial of 50 mg daily in 93 postmenopausal women selected for low libido found no difference from placebo at 26 weeks. [23]

DHEA before fertility treatment. The 2024 Cochrane review included 28 randomized trials, most in women identified as poor responders to standard IVF. DHEA before treatment likely makes little to no difference to live birth or ongoing pregnancy (odds ratio 1.30, 0.95 to 1.76, nine trials, 1,433 women, moderate certainty), to miscarriage (0.85, 0.53 to 1.37) or to clinical pregnancy (1.18, 0.93 to 1.49), while testosterone in the same review likely improves live birth rates (2.53, 1.61 to 3.99). An earlier version reported a positive DHEA result that did not survive removal of trials at high risk of bias.[24]

Whether 7 keto DHEA causes weight loss. A systematic review screened 686 studies and found four controlled trials of 7 keto DHEA and body weight, all at low risk of bias. Two reported a significant fall in body weight, one a fall in body fat percentage, one a fall in body mass index and two a rise in resting metabolic rate, with no serious adverse effects. Its conclusion was that no clear answer can be given and that efficacy and safety need clarifying before it is recommended for therapeutic use.[7]

Pregnenolone outside those conditions, and the capsule forms. Our search found no randomized controlled trial of pregnenolone in healthy adults for memory, mental sharpness, energy, mood or well being; every human trial we retrieved was in people with a diagnosed condition.[13] [17] [18] The claims for pregnenolone as a longevity or memory supplement rest on its position in the steroid pathway and on animal work.[2] We also found no trial of a sustained release, modified release or extended release preparation of either hormone, and none of the two taken together; the trials above used ordinary oral preparations of a single ingredient.[4] [8] [6]

MAIN HUMAN STUDIES Randomized controlled trials unless noted.

STUDY	N	WHO AND HOW	MAIN FINDING
Labrie 2016[14]	482	Postmenopausal women with dyspareunia; 6.5 mg DHEA in the vagina daily, 12 weeks	Pain at sexual activity 0.36 unit better than placebo
Arlt 1999[4]	24	Women with adrenal insufficiency; 50 mg oral DHEA daily, crossover, 4 months per arm	Well being, depression and anxiety improved; sexual interest increased
Gurnell 2008[8]	106	Addison's disease; 50 mg oral DHEA daily, 12 months	Femoral neck bone loss reversed; no benefit for fatigue or cognition
Nair 2006[6]	144	Elderly men and women with low DHEA sulfate; DHEA for 2 years	No effect on body composition, strength or quality of life
Elraiyah 2014[22]	1,188	Meta analysis of 23 trials, postmenopausal women, normal adrenal function	No significant effect on libido, lipids, weight or bone density
Marx 2014[13]	120	Schizophrenia; adjunctive pregnenolone, 8 weeks	Functional capacity improved (p = 0.03); cognition unchanged

SUMMARY

Vaginal DHEA has phase III trials and an FDA approval for one symptom of menopause. Oral DHEA has a real but modest place in adrenal insufficiency and a signal for bone in women over 70. In people with working adrenal glands, the trials of oral DHEA for strength, body composition, cognition and libido came back null. 7 keto DHEA rests on four small trials with mixed results, and pregnenolone has been tested in psychiatric and pain conditions but never in healthy people.

§ 05

How they are given

Every dose below comes from an FDA approved label or a named human study. Where no regulator has set a dose, your physician sets it with you.

DHEA by mouth

No oral DHEA product has an FDA approved label, so there is no label dose.[11] Across the trials the usual dose was 50 mg once a day in the morning: the adrenal insufficiency crossover trial,[4] the 12 month Addison's disease trial,[8] the DHEAge study[16] and the 52 week trial in postmenopausal women.[23] For adrenal insufficiency the Endocrine Society suggests six months, a morning DHEA sulfate drawn before the day's dose aimed at the middle of the normal range, and stopping if no benefit holds.[15]

A sustained release capsule is intended to release its contents over hours rather than at once. No trial of such a preparation of either hormone has been published, so what one does to your blood levels through the day is unknown, as is any clinical result. A combination of DHEA and pregnenolone has not been tested either.

DHEA in the vagina

The label directs one 6.5 mg insert once daily at bedtime, placed with the applicator supplied; the phase III trials used this dose for 12 weeks and a 52 week open label study followed it for a year.[3] [14]

Pregnenolone and 7 keto DHEA by mouth

No regulator has set a dose for either. The published pregnenolone doses come from trials in specific conditions under study monitoring: 500 mg a day over 12 weeks in bipolar depression,[17] and 100, then 300, then 500 mg a day over four weeks in chronic low back pain. [18] No trial has tested pregnenolone in healthy adults, so there is no study dose for a wellness purpose. For 7 keto DHEA, a safety study gave healthy men 50 mg a day for seven days, 100 mg for seven days and then 200 mg for 28 days, and the sulfate it forms had a half life of about 2.2 hours and did not accumulate. [10]

PRACTICAL PROFILE Doses from the FDA label where one exists, otherwise from the named studies.

PREPARATION	ROUTE	DOSE AND SOURCE
Prasterone 6.5 mg insert	Vagina	One insert nightly, from the FDA approved label[3]
DHEA capsule	By mouth	50 mg daily in the trials; no label dose exists[4] [8] [11]
Sustained release or combination capsule	By mouth	No published trial of either; dose set by your physician
Pregnenolone capsule	By mouth	100 to 500 mg daily in condition specific trials[17] [18]
7 keto DHEA capsule	By mouth	Up to 200 mg daily for 28 days in the safety study[10]

§ 06

What to expect

Vaginal DHEA. The phase III trials measured their endpoints at 12 weeks, the interval over which pain at sexual activity, dryness, vaginal pH and the cell picture changed.[14] Vaginal discharge is reported most often, in 5.71 percent against 3.66 percent on placebo, because the insert's hard fat base melts at body temperature. [3]

Oral DHEA. In adrenal insufficiency the crossover trial assessed women after one month and again after four, and the Endocrine Society suggests judging a trial at six months; blood levels respond quickly, how you feel is slower, and in the largest trial the gains were in bone density and lean mass rather than fatigue or cognition.[4] [15] [8] When the adrenal glands work normally, the trials ran one and two years and found no change in strength, physical performance, body composition or quality of life, so there is no timeline to give you for those outcomes, though in women over 70 the DHEAge study saw bone turnover, libido and skin measures move over 12 months. [6] [20] [16]

Pregnenolone and 7 keto DHEA. The pregnenolone trials that found an effect ran four to 12 weeks and none enrolled healthy people, so they give no timeline for energy, memory or mood in someone without one of those conditions.[18] [13] [17] With 7 keto DHEA, resting metabolic rate changed within a seven day treatment period, [19] while body weight was measured in only four trials, half reporting a fall. [7]

§ 07

Safety

The body converts these precursors into androgens and oestrogens, so the side effects follow the hormones.

Androgenic effects in women

Acne and increased hair growth were reported more often on DHEA than placebo in the 52 week trial of 50 mg daily in 93 postmenopausal women, although overall adverse event reports and withdrawals were similar.[23] In the 12 month Addison's disease trial, some older women reached DHEA sulfate levels above the normal range and had mild androgenic side effects, one reason the Endocrine Society suggests monitoring the level and not the dose alone.[8] [15] Tell us promptly about a deepening voice, scalp hair thinning or new hair on the face or body.

Oestrogenic effects and blood fats

DHEA raises oestradiol in both sexes. In the pooled analysis of four 12 month trials, oestradiol rose by 8.7 pg/mL in women and 4.8 pg/mL in men,[12] so breast tenderness or breast enlargement in a man should be reported. In women with adrenal insufficiency on 50 mg daily, total cholesterol and HDL cholesterol both fell significantly, along with sex hormone binding globulin,[4] and a fall in HDL cholesterol is worth a repeat lipid panel. The meta analyses in postmenopausal women and in elderly men found no significant effect on lipids or blood sugar.[22] [20]

Hormone sensitive cancers

The label for vaginal prasterone notes that prasterone is converted into oestrogen, that exogenous oestrogen is contraindicated in women with a known or suspected history of breast cancer, and that the product has not been studied in women with such a history.[3] Separately, a reanalysis of nine prospective studies in 663 postmenopausal women who developed breast cancer and 1,765 who did not, none taking hormones when their blood was drawn, found that risk rose significantly with rising concentrations of DHEA and DHEA sulfate as it did with oestrogens and testosterone.[25] That is an association between a woman's own levels and her later risk, not evidence that taking DHEA causes breast cancer, and no trial has measured whether these preparations change cancer risk. A personal or strong family history of breast, uterine, ovarian or prostate cancer is a reason to look carefully before starting.

Pregnenolone and 7 keto DHEA

Pregnenolone was well tolerated in the trials above, at up to 500 mg a day for 12 weeks.[17] [18] In the dose escalation study of 7 keto DHEA there were no differences in laboratory values or adverse experiences between treatment and placebo at up to 200 mg a day for 28 days,[10] and the systematic review reported no serious adverse effects.[7] These are short studies in small numbers of people.

REACTIONS ON THE FDA APPROVED LABEL FOR VAGINAL PRASTERONE The only one of these products with label rates.[3]

SETTING	REACTION	RATE
Four 12 week placebo controlled trials	Vaginal discharge	5.71 percent (38 of 665) against 3.66 percent on placebo
One 52 week open label trial	Vaginal discharge	14.2 percent (74 of 521)
One 52 week open label trial	Abnormal Pap smear	2.1 percent (11 of 521): one low grade squamous intraepithelial lesion and ten of atypical cells of undetermined significance

TELL YOUR PHYSICIAN BEFORE STARTING IF ANY OF THESE APPLY

- You have had breast, uterine, ovarian or prostate cancer, or there is a strong family history of one of them.[3] [25]
- You have vaginal bleeding that has not been explained, which the label for vaginal prasterone makes a contraindication.[3]
- You have acne, unwanted hair growth, scalp hair loss or a deepening voice, or your androgen levels are already high.[23]

- You have low HDL cholesterol, a lipid disorder, heart disease, liver or kidney disease, or a history of blood clots.[4]
- You are pregnant, planning a pregnancy or breastfeeding.
- You take hormones of any kind, or you are an athlete subject to anti doping rules.[26]
- You take any prescription medicine, over the counter product or supplement. Please bring the full list.

The longest placebo controlled trial of oral DHEA ran two years,[6] the longest of pregnenolone 12 weeks, [17] and the longest study of 7 keto DHEA 28 days. [10] Nothing longer has been published, and there are no long term data on cancer risk, cardiovascular events or mortality for any of them. Please tell us about any reaction, however minor it seems.

§ 08

Is this right for you

These make most sense when there is reason to think your own production has failed, or when the target is the one symptom a DHEA product is approved to treat.

Before we begin

- [ ] A review of your medical history, medications and every supplement you take, including anything bought as a hormone
- [ ] Relevant measurements such as weight and blood pressure, so we have a clear starting point
- [ ] Baseline bloodwork, so anything we see later can be compared against where you began
- [ ] A written note of your goals and how you want to feel, so we can judge progress together

A low DHEA sulfate level is a finding, not a diagnosis. It can be a sign of adrenal insufficiency, confirmed with a corticotropin test and treated first with cortisol and often fludrocortisone; DHEA is an addition to that treatment.[15] Thyroid disease, poor sleep, low iron, depression and medication side effects all produce the tiredness that sends people looking for DHEA, and each has a treatment with better evidence behind it. If your goal is weight, our semaglutide and tirzepatide guides (OCW WP 023 and OCW WP 024) cover medicines with large trials; if it is painful sex, our hormone therapy for women guide (OCW WP 056) sets out the approved options.

Reviewing your progress

We reassess against your documented starting point at defined intervals. Where a blood level is the measure we repeat it, and for DHEA replacement the guideline measure is a morning DHEA sulfate drawn before the day's dose, with six months as a reasonable point at which to decide.[15] Where the measure is how you feel, we compare it against the goals you wrote down. You are welcome to stop at any time, and stopping needs no taper.

> **QUESTIONS TO ASK YOUR PHYSICIAN**
>
> Is my DHEA sulfate actually low for my age and sex, and what could be causing that? Does my goal match anything these have been tested for? Would a single ingredient capsule make it easier to tell what is working? When will we check my lipids and hormone levels? What would make you advise me to stop?

We are glad to answer all of these.

§ 09

Regulatory status

The one approved DHEA medicine. Prasterone, which is DHEA, is approved by the FDA as a 6.5 mg vaginal insert for moderate to severe dyspareunia, a symptom of vulvar and vaginal atrophy, due to menopause. Approved on 16 November 2016, it is the only FDA approved product containing DHEA.[3] [11] Any other use would be off label, which a physician may lawfully do after discussing it with you.

Oral DHEA as a supplement. DHEA is sold in the United States as a dietary supplement. When Congress passed the Anabolic Steroid Control Act of 2004 it defined an anabolic steroid as a substance related to testosterone "other than estrogens, progestins, corticosteroids, and dehydroepiandrosterone", so DHEA was left out of the controlled substance schedules that Act created.[27] A supplement is not reviewed by the FDA for safety or effectiveness before sale, and the amount in the capsule is the manufacturer's responsibility.

Compounded DHEA and pregnenolone. A compounded capsule is a prescription preparation made for you by a licensed pharmacy, a different thing again from a supplement. Compounded drugs are not FDA approved, and the FDA does not verify their safety, effectiveness or quality before they are marketed.[28] Under section 503A of the federal Food, Drug, and Cosmetic Act, a pharmacy compounding on a prescription may use a bulk drug substance only if it meets a United States Pharmacopeia or National Formulary monograph, is a component of an FDA approved drug, or appears on the FDA's 503A bulks list.[29] Prasterone is a component of an FDA approved drug, the vaginal insert above, so it meets one of those conditions.[11] Pregnenolone and 7 keto DHEA are not components of any FDA approved drug, and both sit in Category 1, bulk substances under evaluation, on the FDA's nominated list updated 14 May 2026, with no final decision reached and neither on the Category 2 safety risks list. No published trial has tested DHEA and pregnenolone together, so a combination capsule holds ingredients studied separately and never as a pair.[29]

For athletes. Section S1 of the World Anti Doping Agency's 2026 Prohibited List, anabolic agents, is prohibited at all times, in competition and out of it. Its list of anabolic androgenic steroids names prasterone, given there as dehydroepiandrosterone and DHEA, and also 7 keto DHEA, 7 alpha hydroxy DHEA, 7 beta hydroxy DHEA, androstenediol and androstenedione.[26] Pregnenolone is not named anywhere on the 2026 List, though the section closes by extending to "other substances with a similar chemical structure or similar biological effect(s) including their esters", and pregnenolone is the precursor from which the body makes DHEA, so an athlete should clear it with their own anti doping authority rather than read its absence as permission.[26] A laboratory study also found that routine anti doping procedures applied to 7 keto DHEA can produce confusing results.[9]

If you would like details about the preparation used in your treatment, please ask.

§ 10

Common questions

Will DHEA give me more energy?

If your adrenal glands have stopped making DHEA, replacement improves well being and mood, although pooling 10 trials put the quality of life gain at 0.21, called small and perhaps trivial by its authors, and the largest trial found no benefit for fatigue.[5] [8] If they work normally, two years of DHEA did not improve physical performance, strength or quality of life, and a meta analysis of 25 trials in older men found none either.[6] [20]

I am a woman with low libido. Will DHEA help, and what should I watch for?

In postmenopausal women with normal adrenal function, a meta analysis of 23 randomized trials found no significant improvement in libido or sexual function, and a 52 week trial of 50 mg a day in women selected for low libido found no difference from placebo.[22] [23] Women with adrenal insufficiency are the exception.[4] Acne and increased hair growth were

more common on DHEA, so tell us about those. [23]

Does 7 keto DHEA help with weight loss?

A systematic review screened 686 studies and found four controlled trials of 7 keto DHEA and body weight; two reported a significant reduction, and the reviewers concluded that no clear answer can yet be given.[7] A seven day crossover trial found resting metabolic rate rose 1.4 percent on 7 keto DHEA while falling 3.9 percent on placebo. [19] If weight is the goal, our semaglutide and tirzepatide guides (OCW WP 023 and OCW WP 024) cover medicines with far larger trials behind them.

Is pregnenolone good for memory and mood?

No randomized trial has tested pregnenolone in healthy adults for memory, energy, mood or well being, so the studies do not answer the question.[2] It has been tested in diagnosed conditions: functional capacity but not cognition improved in schizophrenia, depression scores improved in bipolar depression, and pain fell in veterans with chronic low back pain. [13] [17] [18]

Can DHEA and pregnenolone be taken together in one capsule?

A compounding pharmacy can prepare one, but no published trial has tested DHEA and pregnenolone together, and if you feel better or react badly on a combination you cannot tell which ingredient was responsible. Pregnenolone also sits in the FDA's Category 1, substances under evaluation for use in compounding, with no final decision made.[29]

I compete in sport. Will these show up on a drug test?

DHEA, given as prasterone, and 7 keto DHEA are both named in section S1 of the World Anti Doping Agency's 2026 Prohibited List, prohibited at all times, in competition and out of it.[26] Pregnenolone is not named on the 2026 List, though the section extends to other substances of similar chemical structure or biological effect, so an athlete should clear it with their own anti doping authority first. [26] If you are tested, please tell us before you start anything.

Where does my prescription come from, and how do I know it is made properly?

A compounded medicine is prepared by a licensed pharmacy, and federal law sets out two kinds. A pharmacy compounding under section 503A prepares a medicine for one named patient on a prescription, and its state board of pharmacy has day to day responsibility for overseeing it, with the FDA able to inspect as well.[30] An outsourcing facility compounding under section 503B registers with the FDA, follows federal manufacturing quality standards, reports side effects to the FDA, and is inspected by the FDA on a schedule set by risk. [31] We work with pharmacies of both kinds, and which one fills your prescription depends on the product.

Is a compounded medicine the same as something sold online?

No. Compounded medicines are not FDA approved, and the FDA does not review their safety, effectiveness or quality before they are sold, which is why your physician weighs them case by case.[28] What a licensed pharmacy gives you is a preparation made for you on a prescription, by a business a regulator licenses and inspects, with records of the ingredients and testing behind it. Material sold online as a research chemical has none of that. It is labelled as not for human use, its identity, strength, purity and sterility have not been established for a person, and no pharmacist or physician is answerable for what is in the vial.

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26 **World Anti Doping Agency.** The 2026 Prohibited List, section S1.1, in effect 1 January 2026.
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27 **United States Congress.** Anabolic Steroid Control Act of 2004, Public Law 108 358, 22 October 2004.
Section 2(a)(1)(B) excludes dehydroepiandrosterone from the definition of an anabolic steroid. congress.gov, accessed 4 November 2026.

28 **U.S. Food and Drug Administration.** Compounding and the FDA: questions and answers.
States that compounded drugs are not FDA approved and that the FDA does not verify their safety, effectiveness or quality before they are marketed, and that state boards of pharmacy have primary responsibility for day to day oversight of state licensed pharmacies. Current as of 16 September 2025. fda.gov, accessed 4 November 2026.

29 **U.S. Food and Drug Administration.** Bulk drug substances used in compounding under section 503A (current as of 14 May 2026) and Bulk drug substances nominated for use in compounding under section 503A (updated 14 May 2026).
The nominated list places pregnenolone and 7 keto dehydroepiandrosterone in Category 1, under evaluation; neither is on the Category 2 safety risks list of 22 April 2026. fda.gov; fda.gov/media/94155, accessed 4 November 2026.

30 **U.S. Food and Drug Administration.** FD&C Act provisions that apply to human drug compounding.
Sets out the conditions of sections 503A and 503B, including the patient specific prescription under 503A and the manufacturing standards and adverse event reporting under 503B. Content current as of 13 August 2021. fda.gov, accessed 4 November 2026.

31 **U.S. Food and Drug Administration.** Compounding laws and policies.
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