

Hormone Panel

Dehydroepiandrosterone (DHEA)

DHEA is a building block of steroid hormones that are produced primarily In the adrenal glands. It serves as a precursor to the sex hormones testosterone and estrogen in both me and some. It also serves as a building block for cortisol and support immunity. DHEA may increase insulin sensitivity, enhance fat metabolism, and act as an anti-oxidant. DHEA-S stays in the blood stream longer so it is the form they test for.

References for DHEA

Category	Age	DHEAS Normal Range (mcg/dL)
Men	18 - 19	108 - 441
	20 - 29	280 - 640
	30 - 39	120 - 520
	40 - 49	95 - 530
	50 - 59	70 - 310
	60 - 69	42 - 290
	69 +	28 - 175
Women	18 - 19	145 - 395
	20 - 29	65 - 380
	30 - 39	45 - 270
	40 - 49	32 - 240
	50 - 59	26 - 200
	60 - 69	13 - 130
	69+	17 - 90

Supplements to support low DHEA

Ashwagandha, DHEA 5 - 10mg women, 25 - 50mg men, Remora, Whey Protein

Cortisol

Reference Ranges for Cortisol

Time of Day	Cortisol Normal Range
AM	6.2 to 19.4
PM	2.3 to 11.9
Target Range	AM: 10 - 14 mcg/dL PM , 7.0 mcg/dL

Supplement Support for high Cortisol

Magnesium, Melatonin, Relora, Holy Basil, L-theanine

Supplement Support for low Cortisol - Adrenal Fatigue

Raw Adrenal glandular, Ashwagandha, Licorice root

Thyroid Hormones

Are initiated by TSH (Thyroid stimulating hormone from the pituitary gland). Thyroid hormone production includes 2 principal types: The inactive T4 (thyroxine - which is converted to T3) and the active T3 (triiodothyronine) Total T3 and T4 and free T3 and T4 the activating forms available for your cells. In persons with chronic stress or grief reverse T3 tests can be run. Tests are also done for Thyroid anti-bodies. In thyroid cancer thyroid globulin levels are run.

Reference Ranges for Thyroid Hormones

Thyroid Hormone	Normal Range
TSH (Thyroid stimulating hormone)	0.45 - 4.5mIU/ml
Free T3 (free triiodothyronine)	200 - 440 pg/dL
Total T3	71 - 180 ng/dL

Free T4 (thyroxine)	0.82 to 1.77 ng/dL
Total thyroxine T4	4.5 to 12 mcg/dL
Thyroid peroxidase (TPO)	0 - 34 IU/mL

If T3 levels are low compared to T4 and TSH levels, it may signify low thyroid function even if the labs otherwise appear normal.

Supplement support for High Thyroid Hormones

L-carnitine, Moducare (if thyroid anti-bodies are present) Vitamin D, Bugleweed, Lithium

Supplement support for Low Thyroid Hormones

Fucus (seaweed), Bladderwrack (seaweed), selenium, iodine, Tyrosine, 7-Keto DHEA,

Estrogen

There are 3 main forms of Estrogen - Estrone (E1), Estradiol (E2), Estriol (E3)

Estriol is the weakest usually produced during pregnancy. Estradiol the most potent form and the main form for women during the reproductive years. Estrone becomes the predominant form in the post-menopausal years. Estrone can be made by the fat cells of the body and can be problematic in increasing the risk of estrogen driven cancers.

Reference Ranges for Estrogen

Category	Stage.	Estrogen Normal Range (pg/mL)
Men	Prepubertal	12 - 55
	Adult	40 - 115
Women	Prepubertal	12 - 57
	Follicular Phase (Day 1 - 12 menstrual cycle)	61 - 394
	Ovulation Day (Day 13 - 16 menstrual cycle)	122 - 437
	Luteal Phase (Day 17 - 29 menstrual cycle)	156 - 350
Postmenopausal		20 - 40

Supplements to support High Estrogen

Calcium glucarate, DIM (diindolyl-methane), Probiotics

Supplements to support Low Estrogen

Thai Kudzu (Pueria), Red Clover extracts, Black Cohosh, fermented soy, flax seed meal

Progesterone

Although found in both men and women it is primarily known for its role in conception, pregnancy and the regulation of a woman's menstrual cycle. It acts as a coating for the nerve fibers of the brain reducing hyper excitability.

For women the blood test is done 21 days after the start of the period.

Reference Ranges for Progesterone

Category	Progesterone Normal Range (ng/mL)
Men	0.2 - 1.4
Women (pre-ovulation)	< 1.0
Women (mid-menstrual cycle).	5 - 20
Women (pregnant 1st Trimester)	1.2 - 90
Women (pregnant 2nd Trimester)	25.6 - 89.4
Women (pregnant 3rd Trimester)	42.5 - 48.4
Women (postmenopausal).	< 1.0

Supplement support for High Progesterone

Black Cohosh, Calcium glucarate, DIM, Probiotics, Maca (do not take if pregnant or breast feeding) Fish Oils

Supplement support for Low Progesterone

Chasteberry (Vitex) standardized, Natural Progesterone cream (work with your physician)

Testosterone

Testosterone is typically attached to a protein in the blood known as bound testosterone. When this hormone becomes unattached, it is known as free testosterone which is the form that is available to the body. Generally a blood test will measure the combination of both types of testosterone.

Reference Ranges for Total Testosterone

<u>Category</u>	<u>Total Testosterone Normal Range (ng/mL)</u>
Men (13 to 17 years old)	28 - 1110
Men > 18 years old.	280 - 800
Women (under 18 years old)	6 - 82

Reference Ranges for Free Testosterone

<u>Category</u>	<u>Free Testosterone Normal Range (pg/mL)</u>
Men 20 - 29 years old	9.3 - 26.5
Men 30 - 39 years old	8.7 - 25.1
Men 40 - 49 years old.	7.2 - 24
Men 50 - 59 years old	6.8 - 21.5
Men > 59 years old	6.6 - 18.1
Women 20 - 59 years old	0 - 2.2
Women > 59 years old	0 - 1.8

Supplement Support for Low Testosterone

Tongkat ali 300mg - 2x a day Zinc 50mg - 1x a day

Prostate Specific Antigen - PSA

<u>Total PSA (ng/mL)</u>	<u>Category</u>
4.0 - 10.0	High
0.0 - 4.0	Normal

Bicycling riding and ejaculation the night before the test will artificially raise PSA levels

Supplements to support High PSA

Saw Palmetto extract 160mg 3x a day. Fish Oils, Zinc 30mg a day

All information on this paper came directly from

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