



## Formula 6

Herbs and minerals to support 5a-reductase response.

### AT A GLANCE

Testosterone is a crucial hormone for skeletal muscle performance, brain health, bone matrix activity, sexual performance and responsiveness, and longevity support. 5a-DHT is the potent, 5a-reductase-dependent metabolite of testosterone, considered 4x per potent than testosterone itself (although also very short-lived in circulation).

Problems can arise when testosterone is metabolized more readily into 5a-DHT over the 5b-reductase pathway. Although both men and women can benefit from 5a-DHT, it needs to be in healthy balance and alignment with their metabolic needs.

5a-reductase is an enzyme that is upregulated specifically in response to high circulating sugars and insulin levels. Why? Consider when our ancestors would run away from a predator. To run, we would need quick-burning fuel – sugar. When in that fighter- flight stress response (sympathetic dominate state), epinephrine shunts blood to our muscles and lungs and away from our gut, along with epinephrine, our cortisol surges, which stimulates release and activation of sugar from our tissues into our blood stream, and body prepares to push into an anabolic preference. With high sugars the natural response then is to trigger 5areductase – so that our tissues can be anabolic in response. Unfortunately, our tissues do not know the difference between high circulating sugar due to a sympathetic surge, vs high sugar due to stress or high sugars simply from a poor diet. Sugar surge = 5areductase preference.

### Meet Restore

Designed to move, alter and transform our detox intermediates into less reactive and more easily eliminated by-products. Supporting our hormone balance.



Scan to view all formulas.



### KEY BENEFITS



Restores androgenic balance in the body



Supports 5a-reductase activity through reducing inflammation AND reducing enzyme activity



Supports tissue response to androgens

## FORMULA ANALYSIS

Keep in mind, conditions like PCOS and genetics can play a strong role in 5 $\alpha$ -reductase preference as well. But when 5 $\alpha$ -reductase is high, if the patient struggles with symptoms such as diffuse hair thinning for women or the classic “male pattern baldness” in men, painful cystic acne, or excess facial and body hair growth, there may be a need to reduce the 5 $\alpha$ -reductase activity through targeted herbs and minerals, while also digging deeper to support any underlying stress or blood sugar imbalance.

Our formula uniquely targets 5 $\alpha$ -reductase activity by utilizing 5 $\alpha$ -reductase-inhibiting herbs, as well as herbs that reduce inflammation and help to gently regulate insulin response in the body, including:

### Saw Palmetto

Saw palmetto (*Serenoa repens*) has been investigated for its potential to reduce the activity of the enzyme 5 $\alpha$ -reductase, which plays a crucial role in the conversion of testosterone to dihydrotestosterone (DHT). Several studies have suggested that saw palmetto extract may inhibit the activity of 5 $\alpha$ -reductase via its active constituents, including lauric acid, b-sitosterol, stigmasterol, lupenone and cycloartenol[1], thereby supporting and potentially alleviating the symptoms of DHT-associated conditions including benign prostatic hypertrophy in men (BPH) and androgenic alopecia in both men and women[2][3]

### Nettle Root

Nettle Root (*Urtica dioica*) contains phytochemicals that reduce the activity of 5 $\alpha$ -reductase within the cytoplasm of our cells. In addition, nettle root uniquely (not the leaf) contains beta-sitosterol that inhibits the binding of DHT to receptor sites in the skin, hair and prostate[4] [5].

### Curcumin

Curcumin (*curcuma longa*), exhibits anti-inflammatory and antioxidant effects which support not only the tissues being impacted by DHT, but also reduce the pro-inflammatory response that can trigger the up-regulation of 5 $\alpha$ -reductase enzymatic activity[6][7].

### Zinc

Zinc is an essential mineral that supports reproductive health and hormone balance. Studies have demonstrated that among many of its attributes, zinc can help reduce 5 $\alpha$ -reductase response within our tissues[8].

## SUPPLEMENT FACTS

Serving Size 1 Capsule  
Servings Per Container 90

Amount Per Serving	% Daily Value
Zinc (as zinc picolinate)	0.67 mg 6%
Copper (as copper citrate)	0.03 mg 4%
Papain (from papaya) powder (30,000 PU/MG (500 TU/mg))	118410 PU †
Borage ( <i>Borago officinalis</i> ) (seed) extract powder	100 mg †
Saw palmetto ( <i>Serenoa repens</i> ) (berry) extract	80 mg †
Milk thistle ( <i>Silybum marianum</i> ) (seed) extract	66.7 mg †
Reishi Mushroom ( <i>Ganoderma lucidum</i> ) (fruiting body) extract 4:1	41.7 mg †
Fo-Ti (He-Shou-Wu) ( <i>Polygonum multiflorum</i> ) (root) powder	33.3 mg †
Turmeric ( <i>Curcuma longa</i> ) (rhizome) 95% curcuminoides	33.3 mg †
Stinging nettle ( <i>Urtica dioica</i> ) (root) extract 10:1	10 mg †
Lycopene	3.3 mg †
Black Pepper ( <i>Piper nigrum</i> ) (fruit) (95% piperine) (BioPerine®)	0.7 mg †

† Daily Value not established

**Other ingredients:** Vegetable capsule (hypromellose), microcrystalline cellulose, magnesium stearate, and silicon dioxide.

## SUGGESTED USE

Take 1 capsule 3 times a day with a meal or as directed by your healthcare practitioner.

**CAUTION:** Do not use if pregnant or nursing. Consult your physician before use if you have a medical condition, or taking any medication. Do not use product if the safety seal is broken or damaged. Keep out of reach of children.

## MADE WITHOUT

Corn, soy, or wheat.

\*These statements have not been evaluated by the Food & Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

## REFERENCES

1. Raynaud JP, Cousse H, Martin PM. Inhibition of type 1 and type 2 5alpha-reductase activity by free fatty acids, active ingredients of Permixon. *J Steroid Biochem Mol Biol*. 2002 Oct;82(2-3):233-9. doi: 10.1016/s0960-0760(02)00187-5. PMID: 12477490.
2. Pais P. Potency of a novel saw palmetto ethanol extract, SPET-085, for inhibition of 5alpha-reductase II. *Adv Ther*. 2010 Aug;27(8):555-63. doi: 10.1007/s12325-010-0041-6. Epub 2010 Jul 10. PMID: 20623347.
3. Abe M, Ito Y, Oyunzul L, Oki-Fujino T, Yamada S. Pharmacologically relevant receptor binding characteristics and 5alpha-reductase inhibitory activity of free Fatty acids contained in saw palmetto extract. *Biol Pharm Bull*. 2009 Apr;32(4):646-50. doi: 10.1248/bpb.32.646. PMID: 19336899.
4. Csikós E, Horváth A, Ács K, Papp N, Balázs VL, Dolenc MS, Kenda M, Kočevar Glavač N, Nagy M, Protti M, Mercolini L, Horváth G, Farkas Á, On Behalf Of The Oeonom. Treatment of Benign Prostatic Hyperplasia by Natural Drugs. *Molecules*. 2021 Nov 25;26(23):7141. doi: 10.3390/molecules26237141. PMID: 34885733; PMCID: PMC8659259.
5. Chrubasik JE, Roufogalis BD, Wagner H, Chrubasik S. A comprehensive review on the stinging nettle effect and efficacy profiles. Part II: urticae radix. *Phytomedicine*. 2007 Aug;14(7- 8):568-79. doi: 10.1016/j.phymed.2007.03.014. Epub 2007 May 16. PMID: 17509841.
6. Ide H, Lu Y, Noguchi T, Muto S, Okada H, Kawato S, Horie S. Modulation of AKR1C2 by curcumin decreases testosterone production in prostate cancer. *Cancer Sci*. 2018 Apr;109(4):1230-1238. doi: 10.1111/cas.13517. Epub 2018 Feb 19. PMID: 29369461; PMCID: PMC5891173.
7. Srivilai, Jukkari et al. (2017). Anti-androgenic curcumin analogues as steroid 5-alpha reductase inhibitors. *Medicinal Chemistry Research*. 26. 1-7. 10.1007/9 s00044-017-1869-y.
8. Stamatiadis D, Bulteau-Portois MC, Mowszowicz I. Inhibition of 5 alpha-reductase activity in human skin by zinc and azelaic acid. *Br J Dermatol*. 1988 Nov;119(5):627-32. doi: 10.1111/j.1365-2133.1988.tb03474.x. PMID: 3207614.