

## **Pregnenolone and DHEA – By Gene Devine**

### **Pregnenolone - Why You Need It**

Pregnenolone is a hormone that many Doctors and men are not familiar with or understand its role in the CHOL pathways but it's critically important to our health as it is a "precursor hormone" to all other hormones in our body. Restoring Pregnenolone to optimal levels is important but seems to get the least attention by Doctors. Remember, the testes are the single largest producer of the hormone Pregnenolone. Pregnenolone is important for proper mental functioning and is the precursor to all of the steroid hormones found in the three CHOL pathways such as DHEA, testosterone, DHT, estrogen, cortisol...

### **So what are the benefits of Pregnenolone?**

In our bodies Pregnenolone is synthesized from cholesterol (CHOL) via the P450scc enzyme. This critical hormone performs many functions in a man's body, including:

- Promotes healthy brain function and protects against dementia and Alzheimer's disease. Many men state feeling good when they start supplementing Pregnenolone.
- It can also prevent age related diseases and support the Central Nervous System (CNS).
- Boosts the immune system and increases energy production.
- Protects against coronary disease and improves heart health and can lower cholesterol levels.
- Enhances mood and relieves depression. Many men state their mood betters when they start supplementation.
- Relieves arthritis pain!
- Fights the effects of fatigue and stress.

The optimal serum levels for Pregnenolone is 180 ng/dl for men. Pregnenolone can be purchased over the counter in a pill form (micronized slow release is the best for oral pills) or sublingual form in addition to transdermal applications. A typical dose is 50 to 200 mg daily best taken in the morning on an empty stomach (transdermal applied in the morning as well). Pregnenolone is considered safe and because it converts to DHEA which leads to other hormones. The labs for testing Pregnenolone serum levels are wildly inaccurate and expensive so testing for serum levels is really no more than an estimate.

### **DHEA Supplementation**

#### **Dehydroepiandrosterone: DHEA**

**As presented by Dr. Neal Rouzier, M.D.**

Here's a great reason to add DHEA to your protocol.

DHEA is a hormone secreted primarily by the adrenal glands. It results in a shift of a catabolic state to an anabolic or protein building state.

- It reduces cardiovascular risks by increasing lipolyses (decrease visceral fat).
- It stimulates the immune system, restores sexual vitality, improves moods, decreases cholesterol and body fat.
- It improves memory, increases energy, and has anti-cancer properties by enhancing the immune system.
- It is an endocrine precursor to other hormones, prevents immuno-senescence, loss of sleep, osteoporosis, atherosclerosis.
- DHEA reduces insulin requirement
- Adrenal hormone anabolic vs. catabolic metabolism
- Restores immunity
- Prevents osteoporosis, increases bone density
- Prevents cancer in lab animals
- Prevents diabetes & heart disease
- Decreases visceral fat
- Improves mood & well-being
- Improves energy & memory
- Slows aging process in lab animals
- Prevents lipid peroxidation = antioxidant
- Endocrine precursor to T.P.E.
- 7-keto DHEA is not a precursor to other HRT = avoid
- Neurotransmitter (recently discovered)
- Presently pending FDA approval for Lupus (Prasterone)

**Clinically substantiated uses of DHEA include replacement for:**

- Low DHEA levels
- Chronic disease
- Adrenal exhaustion or corticosteroid therapy
- SLE
- Improving bone density
- Improving depression & mood disorders
- Enhancing immune response by activating T-cells
- Improving well-being
- Decreasing cardiovascular risk
- Improving erectile dysfunction
- Anyone over 40
- DHEA has never been shown to reverse the aging process
- Nevertheless DHEA is important for preventive medicine
- DHEA inhibits synthesis of thromboxane A2, reduces plasminogen activator inhibitor, and tissue plasminogen activator – all decreasing platelet aggregation and ischemia.

**Administration:**

Men<200lb: 50mg AM

Men>200lb: 75-100mg AM

Women <50yo: 10-15mg AM

Women >50yo: 25mg AM

**IMPORTANT:**

DHEA Serum Levels

MEN

- Range 100-600
- Optimal 500-600

WOMEN

- Range 50-300
- Optimal 200-250

Higher levels in women predispose them to side effects – therefore stay low.

- Monitor monthly until optimal
- Assure correct dose and compliance
- Measure DHEA-S and not DHEA
- Side effects: acne, hirsutism
- Tx: Lower dose or take QOD Spironolactone 100 mg/day
- Contraindicated in sex hormone responsive tumors – breast, ovarian, uterine, prostate
- Conversion to T.P.E.?
- DHEA raises testosterone levels in women slightly, yet not in men
- DHEA raises estradiol slightly in men

**Indications:**

- Over age 40 for health protection
- Preventive medicine and well-being
- Symptoms of aging, mood & depression
- Cause the medical literature suggests it if we want to live longer, happier, healthier

## **DHEA – S**

### **MEN Blood levels**

- Optimal : 500-600 ug/ml
- Side effects rare in men

### **WOMEN Blood Levels**

- Optimal : 200-250 ug/ml
- Dose based on side effects
- Side effects very common in women

### **DHEA Dose**

#### **MEN**

- Capsule – SR micronized
- 50 mg Q am
- >200 lbs – 75 - 100 mg Q am

#### **WOMEN**

- Capsule – SR micronized
- 10 mg Q am if over 40
- 15 mg Q am if over 50
- 25 mg Q am if over 60
- If under age 40, do not prescribe due to sensitivity causing side effects.