



### Ashwagandha Insights

### **ASHWAGANDHA & MEN'S HEALTH**



# Ashwagandha Insights

#### Ashwagandha & Men's Health

#### Table of Contents

Men's Sexual Health	3
Plummeting libido is a rising problem	3
Stress: A threat to sexual vitality	4
The sexual supplements market	4
Ashwagandha : An age-old aphrodisiac	4
Key Findings	
i) Enhancing Sexual Wellness	5
ii) Testosterone Enhancement	6
iii) Stress Reduction	7
Trusted by top brands globally	8
Customer Speaks	9
References	10



## **Men's Sexual Health**

What was only spoken about under great discomfort, men's sexual and urological health is now being spoken of openly, in the attempt to prevent or reduce issues. However, compared to women, they remain rather reluctant to generate these conversations. In a snapshot of men's health in the United States, the Centers for Disease Control and Prevention (CDC) report that 12.4% of adult males are in fair or poor health, 55.6% meet aerobic physical activity guidelines, and 17.8% currently smoke cigarettes. Furthermore, 32.6% of adult men have high blood pressure, and 34.5% are obese.



Sexual health is multifaceted topic and there is never just one symptom or pathway to address for individuals experiencing sexual health issues; it just is not that simple. Sexual health is defined as a state of physical, emotional, mental, and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity by the World Health Organization.

Optimal male sexual wellness encompasses sexual desire (libido) and the ability to obtain and sustain an erection (erectile function). While physiology can influence both the desire for and the ability to have sex, mental health and emotional factors also play important roles.

#### Plummeting libido is a rising problem



A study of more than 5000 men in European countries found that 14.4% reported lack of sexual desire lasting two months or longer in one year. Other surveys found that low libido in men ranged from 13% to 28%, depending on the region of the globe.

The causes for low libido can be either physical (lack of blood flow to vital organs, itself with numerous causes), psychological (low-grade depression, anxiety or fear of intimacy) or even physiological (underlying disorder).

#### Stress: A threat to sexual vitality



Daily stress of all kinds taxes the nervous system, disrupting the hypothalamus. A key component in stress response is the hypothalamic-pituitary-adrenal axis, which is involved in releasing the stress hormone cortisol, among other functions. Research indicates that there is strong evidence confirming that high stress, as indicated by elevated cortisol, is regularly associated with the lower testosterone concentrations <sup>1</sup>.

#### The sexual supplements market

The global sexual enhancement supplements industry is expanding rapidly as a result of rapidly shifting perceptions of the use of sexual enhancement supplements as a result of media attention.

Additionally, since Viagra went off patent in 2019, numerous generics and "me too" products jumped in brashly to capture market slices – their cumulative marketing campaigns have created more awareness of male sexual health and stamina.

The Global Sexual Enhancement Supplements Market is expected to grow by \$ 407.16 million during 2020-2024, progressing at a CAGR of 9% during the forecast period  $^2$ .



#### Ashwagandha : An age-old aphrodisiac



Ashwagandha is one of the most revered plants in traditional Ayurvedic medicine. It is an adaptogen and belongs to an elite group of rejuvenating herbs called rasayanas. Rasayanas also work effectively as an aphrodisiac –- helping increase drive and desire as well as intensify sensual pleasure. According to the Ayurvedic philosophy, rasayanas bring a special kind of sexual energy into the body called Ojas which is the basis of sexual health.

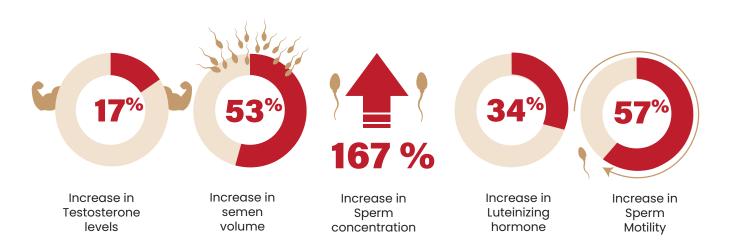
As an adaptogen, Ashwagandha can help modulate stress in different forms and create homeostasis in the body. Clinical research has shown that it lowers cortisol levels in the body through the hypothalamic-pituitary-adrenal (HPA) axis, and acts as a GABA-mimetic by activating the body's GABA receptors to produce sedative effect.

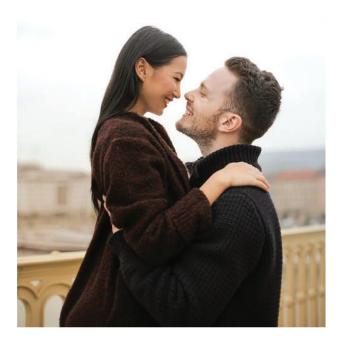
## Key findings of KSM-66 Ashwagandha in human clinical studies for improving sexual health.

Several clinical studies on Ashwagandha and sexual wellbeing have emerged, providing empirical evidence for what traditional practitioners have known for decades. In this paper, we summarize the key findings of KSM-66 through human clinical studies showing values for increasing testosterone, sperm concentration, sperm motility, sexual arousal, and sexual drive.

#### **Enhancing Sexual Wellness**

One of the leading studies published in *Evidence-based complementary and alternative medicine*, examined the effects of KSM-66 Ashwagandha supplementation for 12 weeks<sup>3</sup>. This randomized, double-blind, placebo-controlled clinical trial involved 46 males aged 22 to 44. All participants were healthy, but had oligospermia, a condition that causes low sperm count. The study found KSM-66 Ashwagandha root extract supplementation increased testosterone levels by 17%, semen volume by 53%, sperm concentration by 167%, luteinizing hormone by 34%, and sperm motility by 57%.

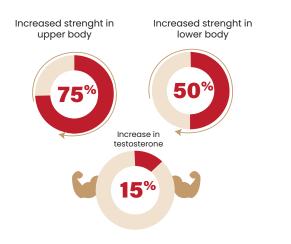




In a soon-to-be-published single centered randomized double-blind placebo-controlled clinical trial involving 50 male subjects, researchers evaluated the efficacy of KSM-66 Ashwagandha supplementation (600mg / day) on male sexual function<sup>4</sup>. The results demonstrated an improvement from baseline in the Derogatis Interview for Sexual Functioning in Male (DISF-M) questionnaire score. Specifically, the subjects who consumed KSM-66 Ashwagandha root extract reported a significant increase in sexual fantasy, sexual arousal, sexual behavior, sexual drive and orgasm when compared to the placebo supplemented group. In addition, the KSM-66 group showed a significant increase in the testosterone level. As a powerful adaptogen, Ashwagandha root extract also fortifies male sexual health indirectly, via enhancing testosterone production and significantly mitigating stress response. KSM-66 Ashwagandha root extract also has been shown to provide these benefits in clinical settings.

#### Testosterone Enhancement

In 2015, a randomized double-blind placebo-controlled clinical trial, published in *Journal of the International Society of Sports Nutrition*, involved 57 men with very little experience in resistance training<sup>5</sup>. Researchers assessed the subject's testosterone levels, muscle strength measure by a maximal single repetition load, muscle size, and body fat percentage. At the conclusion of the study, those who supplemented with KSM-66 Ashwagandha root extract improved muscle strength and size through resistance by increasing testosterone levels in the body by more than 15% and boosting strength by almost 75% in the upper body and 50% in the lower body.





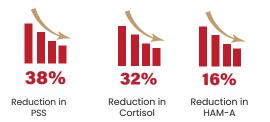
In a new, soon-to-be-published randomized, double-blind, placebo-controlled study, researchers evaluated the ability of 8 weeks of KSM-66 Ashwagandha root extract supplementation on testosterone enhancement along with muscle strength and recovery in 80 participants (40 men and 40 women)<sup>6</sup>. KSM-66 Ashwagandha root supplementation produced statistically significant increases in the levels of total testosterone and free testosterone in male participants, but not in female participants. At the end of the study, significant increases for both male and female participants were observed in terms of muscle strength, muscle size, recovery, and endurance.



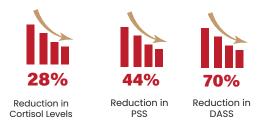
#### **Stress Reduction**

Research published in *Indian Journal of Psychological Medicine* examined the effects of KSM-66 ashwagandha supplementation (600mg/day) for eight weeks and found remarkable results in the reduction of stress and subjective measures of stress - those in the KSM-66 group experienced a 28% reduction in cortisol levels. Ashwagandha root extract also produced a 44% re-duction on the Perceived Stress Scale (PSS), and reduced depression, anxiety, and stress by more than 70% on the Depression Anxiety Stress Scale (DASS)<sup>7</sup>.

#### KSM-66 Supplementation resulted in



KSM-66 Supplementation resulted in



In another study published in *Cureus*, researchers examined the effect of KSM-66 Ashwagandha root extract supplementation on reducing stress and anxiety over 8 weeks<sup>8</sup>. The randomized, prospective, double-blind, placebo-controlled clinical study involved 60 healthy adults between the ages of 18 and 55. The study found that participants who supplemented with 600mg of KSM-66 ashwagandha experienced a 38% decrease in Perceived Stress Scale (PSS), 32% reduction in serum cortisol and a 16% reduction in anxiety measured through Hamilton Anxiety Scale (HAM-A).





#### Trusted by top brands globally



#### Customer Speaks:

We researched many ingredients for our Mdrive brand, not just Ashwagandha extracts. Our brand is a health supplement for men over 40. KSM-66 met many of the requirements we had for the brand - an adaptogen with many years of use as a healthy, more natural way to combat stress and maintain a healthy testosterone level. Then the clinical was released showing how valuable KSM is for the active, sports-minded male and we incorporated KSM into our athlete formulas - Mdrive Elite and Mdrive Start Protein Powder. KSM has the most clinical research of all the other branded Ashwagandha Extracts on the market. From the full spectrum extract to the sustainable farming practices to all the certifications KSM has obtained, we feel we can trust the ingredient to be safe and effective batch to batch.



The Ashwagandha ingredient was very easy to work in both our capsule formulas and our powder formula. It is basically tasteless so formulating it into our powder product was seamless. One thing we have learned is that the product may be a great formula but if it doesn't taste good no one will stick with it. KSM has been great or we would not have incorporated it into almost every one of our products! Our consumers, which include many athletes, appreciate that KSM works with their own bodies to mitigate the stressors of athletic life and promotes balance in the body.



They also appreciate that KSM has clinical evidence that shows it enhances energy, endurance, muscle strength, and recovery, as well as increases cognitive function. We always trusted that not only were we buying a great ingredient with a lot of clinical research behind it but we also were buying from a very ethical company that we trust to be there for us no matter what.

Cecile Kehoe Dreambrands Inc.

#### References

1. Collomp, K., Baillot, A., Forget, H., Coquerel, A., Rieth, N., & Vibarel-Rebot, N. (2016). Altered diurnal pattern of steroid hormones in relation to various behaviors, external factors and pathologies: A review. Physiology & Behavior, 164(Pt A), 68–85. doi:10.1016/j.physbeh.2016.05.039

2. https://www.researchandmarkets.com/reports/5178324/global-sex-ual-enhancement-supplements-market-2020

3. Ambiye VR et al. "Clinical Evaluation of the Spermatogenic Activity of the Root Extract of Ashwagandha (Withania somnifera) in Oligospermic Males: A Pilot Study." Evid Based Complement Alternat Med. 2013:571420.

4. Unpublished data under peer review

5. Wankhede, S., Langade, D., Joshi, K., Sinha, S. R., & Bhattacharyya, S. (2015). Examining the effect of Withania somnifera supplementation on muscle strength and recovery: a randomized controlled trial. Journal of the International Society of Sports Nutrition, 12, 43. https://doi.org/10.1186/s12970-015-0104-9

6. Unpublished data under peer review

7. Chandrasekhar, K., Kapoor, J., & Anishetty, S. (2012). A prospective, randomized double-blind, placebo-controlled study of safety and efficacy of a high-concentration full-spectrum extract of ashwagandha root in reducing stress and anxiety in adults. Indian journal of psychological medicine, 34(3), 255–262. https://doi.org/10.4103/0253-7176.106022

8. Salve J, Pate S, Debnath K, Langade D. Adaptogenic and Anxiolytic Effects of Ashwagandha Root Extract in Healthy Adults: A Double-blind, Randomized, Placebo-controlled Clinical Study. Cureus. 11(12). doi:10.7759/cureus.6466

