

The Efficacy and Applications of Green Jacket Ephedra-Based Supplement Tablets: A Research Review

Abstract

The Green Jacket supplement is a thermogenic, energy-enhancing, and neurotransmitter-supportive formulation presented in tablet form. This paper reviews the pharmacological basis of its ingredients, their clinical relevance, and potential applications for weight management, energy metabolism, cognitive enhancement, and sexual health. The analysis incorporates recent literature on ephedra, guarana, yohimbine, and other natural compounds to evaluate both efficacy and safety.

1. Introduction

Nutritional supplements have increasingly been designed to support weight management, energy production, and cognitive performance. Green Jacket is a proprietary formulation delivered in tablet form that combines ephedra extract with synergistic natural compounds. Its design targets metabolic regulation, appetite suppression, and energy enhancement while incorporating additional ingredients for cognitive focus and sexual performance.

This paper examines the pharmacological properties of Green Jacket, evaluates relevant clinical studies on its constituents, and discusses implications for consumer health.

2. Composition and Mechanisms of Action

2.1 Ephedra (*Ephedra sinica*)

Ephedra is a central nervous system stimulant with effects similar to adrenaline. It enhances basal metabolic rate (BMR), promotes fat oxidation, and supports thermogenesis. Ephedra's bioactive alkaloids also demonstrate antioxidant, immunosuppressive, and hypoglycemic properties (Tang et al., 2023).

2.2 Bitter Orange (*Citrus aurantium*)

Bitter orange contributes synephrine and related compounds that stimulate adrenergic receptors, potentially supporting metabolic rate increases.

2.3 Yohimbine

Yohimbine, included in the Yohimatrix herbal blend, is primarily associated with improved erectile function. Meta-analyses suggest synergistic benefits when combined with other supplements (Wibowo,

Soebadi, & Soebadi, 2021).

2.4 Guarana (*Paullinia cupana*)

Guarana provides both caffeine and unique bioactive molecules that improve mitochondrial function and support healthy metabolism. Studies indicate benefits in weight management, cognitive performance, and anti-aging processes (Lima et al., 2018; Torres et al., 2022; Hack et al., 2023).

2.5 Additional Caffeine Sources

Yerba mate and kola nut extracts contribute further natural caffeine, enhancing stimulant and focus effects.

3. Research Evidence

Ephedra: Shown to regulate body temperature and cardiovascular stability, with potential application in conditions such as asthma and even COVID-19 symptom management (Jo et al., 2011; Tang et al., 2023). Yohimbine: Demonstrated efficacy in improving erectile function and possibly libido, particularly in men (Wibowo et al., 2021). Guarana: Found to stimulate mitochondrial biogenesis, enhance energy metabolism, and improve cognitive task performance (Lima et al., 2018; Hack et al., 2023).

4. Safety Considerations

Although ephedra and other stimulants in Green Jacket tablets provide metabolic and performance benefits, they may also pose cardiovascular and neurological risks if misused. Some extracts (e.g., ephedrine alkaloids-free preparations) have been formulated to reduce adverse effects such as insomnia and arrhythmias (Takemoto et al., 2018). Users are advised to consult physicians before use.

5. Conclusion

Green Jacket tablet formulation combines ephedra, guarana, yohimbine, and other natural stimulants to support weight management, metabolic health, and cognitive performance. Current literature supports the efficacy of individual components, though long-term safety of the complete formulation remains underexplored. Further randomized controlled trials are required to confirm synergistic effects in humans.

References

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