

PHARMACOLOGICAL PROPERTIES OF HORSETAIL (EQUISETUM ARVENSE) IN THE TREATMENT OF JOINT DISEASES

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Horsetail (*Equisetum arvense*) is a potent herbal remedy known for its pharmacological properties that significantly contribute to the therapy of joint diseases. This plant is rich in bioactive compounds such as flavonoids, phenolic acids, and silica, which confer a range of therapeutic effects beneficial for joint health. The anti-inflammatory properties of horsetail play a crucial role in alleviating symptoms associated with inflammatory joint conditions, such as arthritis and osteoarthritis. By inhibiting pro-inflammatory mediators, horsetail extract can effectively reduce swelling, pain, and stiffness in affected joints.

Additionally, silica, a major component of horsetail (*Equisetum arvense*), is essential for collagen synthesis, promoting the regeneration of connective tissues and cartilage. This regenerative capability is particularly valuable in the context of joint diseases, where the maintenance of cartilage integrity is vital for proper joint function. Studies have shown that the incorporation of horsetail in therapeutic regimens not only enhances pain relief but also improves overall joint mobility and flexibility.

This research aims to investigate the pharmacological mechanisms of horsetail in treating joint diseases, emphasizing its role in reducing inflammation, alleviating pain, and supporting tissue repair. The findings of this study highlight horsetail's potential as an effective natural treatment option that can be integrated into herbal formulations and complementary therapies for individuals suffering from chronic joint disorders. Ultimately, this work seeks to establish a foundation for further clinical studies to validate the therapeutic efficacy of horsetail and promote its use in modern phytotherapy for joint health.