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THERAPEUTIC AND NUTRACEUTICAL POTENTIAL OF MEDICINAL MUSHROOMS IN INTEGRATIVE VETERINARY MEDICINE

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Abstract: Medicinal mushrooms have gained increasing recognition in integrative veterinary medicine due to their remarkable nutraceutical and therapeutic potential. The present study investigates the role of several medicinal and edible mushroom species in supporting animal health and preventing disease.

• Introduction

Notable species, including *Ganoderma lucidum* (Reishi) (fig.1), *Cordyceps sinensis* (fig.2), *Lentinula edodes* (Shiitake) (fig.3), and *Hericium erinaceus*, were examined for their immunomodulatory, antioxidant, anti-inflammatory, and antimicrobial properties. Within the framework of veterinary integrative practice, these mushrooms may function as adjuvant agents in the prevention and management of chronic diseases, infectious conditions, neoplasms, and metabolic disorders. Growing evidence indicates that mushroom-derived nutraceuticals can enhance immune modulation, oxidative stability, and overall vitality in animals, thereby improving their health status and resilience.



Fig.1 *Ganoderma lucidum* Fig. 2 *Cordyceps sinensis* Fig.3 *Lentinula edodes*

• Material and method

The beneficial effects of mushroom-based products were evaluated experimentally, both *in vitro* and in a murine model (fig.4). The experimental setup included extracts and powdered formulations from three mushroom species, two of which are edible and cultivable, demonstrating their practical feasibility for inclusion in veterinary nutrition and therapy.

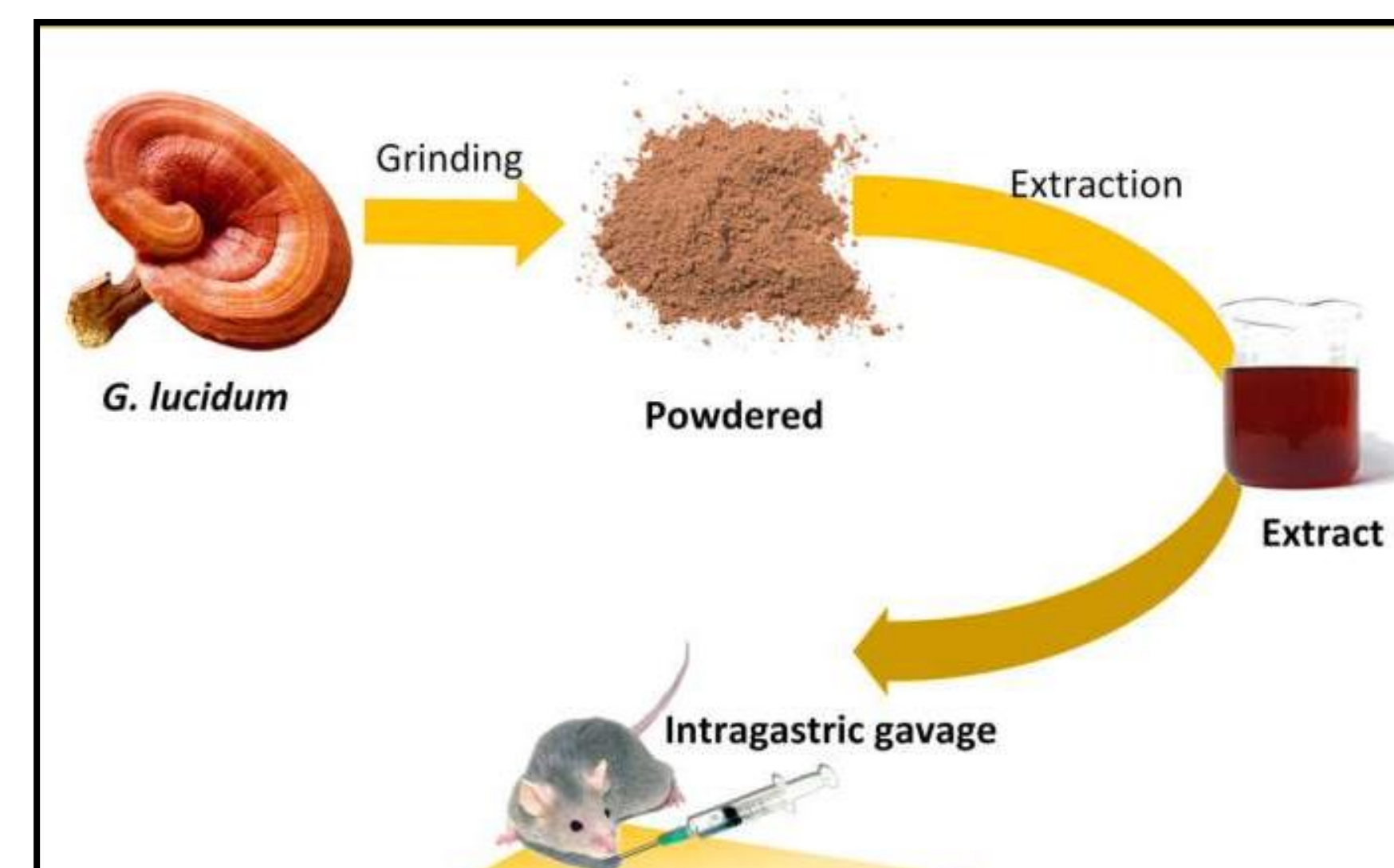


Fig.4 The steps of obtaining the extract and the route of administration in the animal model

• Results and discussions

The findings highlight the necessity for further studies to establish standardized dosage protocols, clarify mechanisms of action, and assess species-specific physiological responses in animals. Collectively, the results support the potential of medicinal mushrooms as safe, natural, and multifunctional nutraceuticals for application in integrative veterinary medicine.

• Conclusions

Medicinal mushrooms have great potential in integrative veterinary medicine, as they are safe and natural sources of beneficial factors with immunomodulatory, antioxidant, antimicrobial, and anti-inflammatory properties. Further studies should be made to better understand how the mushrooms can be used in everyday practice, but we should not cast aside the benefits they carry.

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