NATURE'S
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HEALING WITH NATURE

IRISH CANNABIS WHOLESALE

NATURE'S PHARMATROPIA CALM-CAPS

A GUIDE TO AMANITA - MICRODOSING

Amanita Muscaria, or the fly agaric, is a striking red and white mushroom recognized for its distinctive looks and cultural significance. Indigenous to the Northern Hemispher. Recent research has highlighted potential health benefits, including anxiety reduction, sleep enhancement, and possible neuroprotective effects, positioning this mushroom as a promising focus in natural health practices.

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GENERAL AND HISTORICAL BACKGROUND:

The Amanita Muscaria, also known as the fly agaric, is a vibrant mushroom characterized by its red cap adorned with white spots, a feature that has cemented its place in folklore, fairy tales, and video games. Predominantly found in the Northern Hemisphere's temperate and boreal zones, it has also made its way to regions like Australia and New Zealand, thriving symbiotically alongside trees such as birches and pines.

For centuries, this mushroom has held a sacred status in northern cultures, especially in Siberia, where it has been utilized as an entheogenic substance in shamanic rituals. An interesting facet of its historical use involves the consumption of reindeer urine, believed to be safer due to the animal's conversion of the mushroom's toxic ibotenic acid into the less harmful muscimol.

Despite being commonly categorized as poisonous, the Amanita Muscaria is rarely fatal. It contains ibotenic acid and muscimol, compounds that yield a complex array of effects upon consumption. Ingesting it raw or undercooked can lead to symptoms ranging from gastrointestinal distress to hallucinations, largely due to ibotenic acid. However, correct preparation methods like drying or cooking can transform much of the ibotenic acid into muscimol, unlocking potential health and therapeutic benefits. It's vital to understand and apply proper preparation techniques to exploit its potential advantages.

In modern times, the recreational use of this mushroom has diminished due to its possible adverse effects. Its primary contemporary usage is for spiritual or entheogenic activities, with recent studies investigating its medicinal potentials, including applications in anxiety management, insomnia and substance withdrawal protocols.

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The Amanita muscaria, a notable type of mushroom, has been extensively researched, particularly focusing on its chemical components. The primary compounds found in it are ibotenic acid, muscimol, muscarine, and muscazone. These substances are isoxazole derivatives, meaning they share a specific structural feature, which is highlighted in various resources such as the inchem.org website.

Ibotenic acid is quite an interesting compound as it shares similarities with the neurotransmitter glutamate. This acid can transform into muscimol through a process called decarboxylation, which can occur both inside the body and when the mushroom is dehydrated. In simpler terms, it loses a part of its structure, changing its properties and turning into muscimol.

Muscimol, on the other hand, behaves like GABA, another neurotransmitter, playing a specific role in the communication of brain cells. It has a particular affinity for GABAA receptors, helping in the transmission of signals in the brain. It, too, is soluble in water, making it easier for the body to absorb and process. Meanwhile, muscarine has a function that mimics acetylcholine, a neurotransmitter crucial in the cholinergic nervous system. Though it is found in smaller quantities in the Amanita muscaria, it still contributes to the mushroom's overall effect on the human body.

Then there is muscazone, a unique compound found exclusively in this kind of mushroom. It's a derivative of glycine, an amino acid, and its structure has been confirmed through synthetic processes.

In addition to these, the Amanita muscaria contains trace amounts of other active constituents, although their effects are believed to be minor compared to the main compounds discussed.

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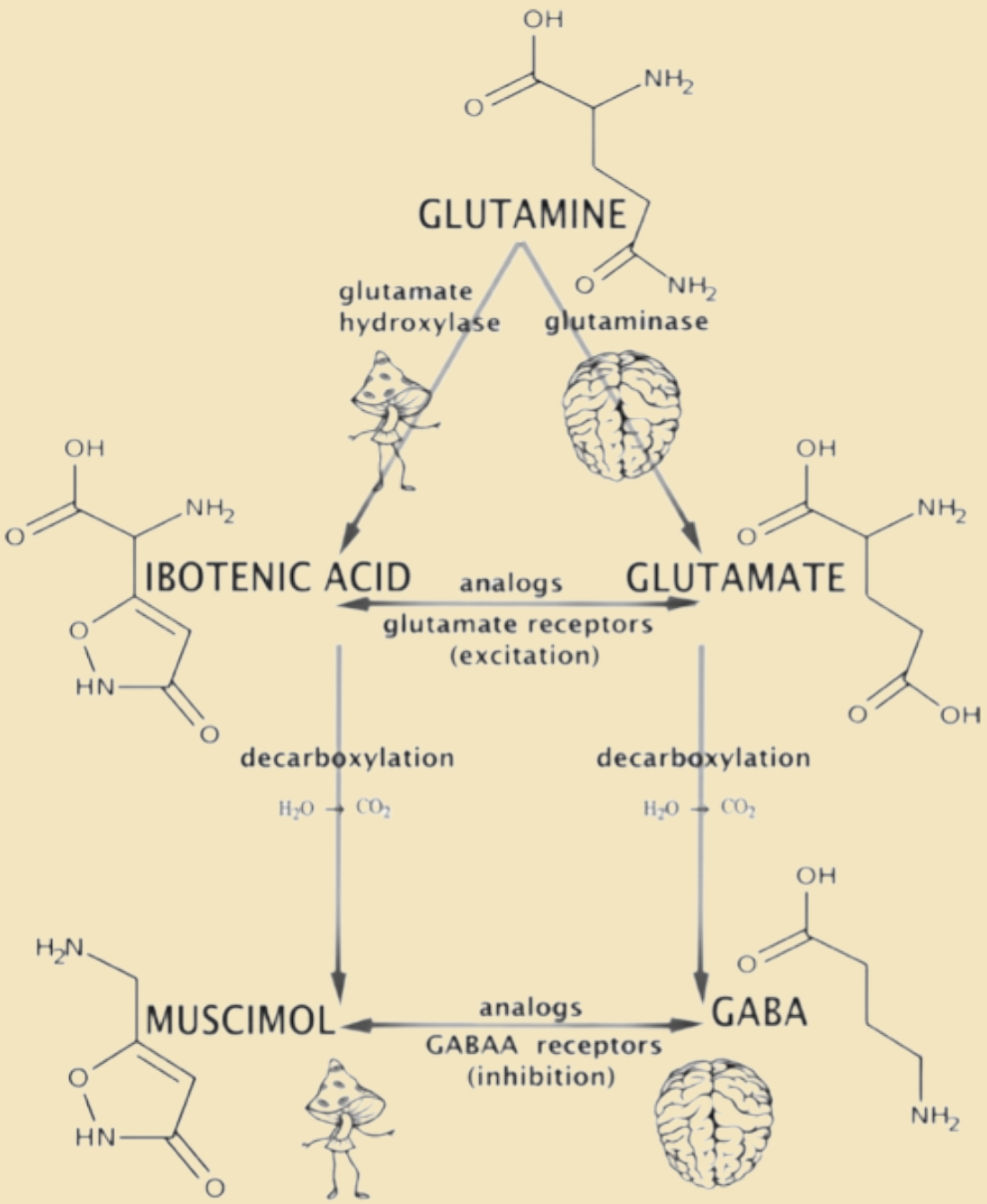

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PHARMACUTICAL ACTION

A considerable body of research suggests that the components found in Amanita muscaria, a type of mushroom, have potential medicinal benefits, especially when considering the impacts of one of its key ingredients, muscimol. Research indicates that muscimol could serve as a groundbreaking therapeutic agent in the treatment of Parkinson's disease. Specifically, microinjections of this compound in the subthalamic nucleus have been found to reverse Parkinsonian symptoms. Moreover, muscimol appears to suppress essential tremors effectively without hampering speech and coordination, which is a promising development in the medical field.

Furthermore, muscimol has been linked to notable neuroprotective effects, showcased through significant results in in vitro neurotoxicity models. In addition to this, it seems to aid individuals suffering from Huntington's disease and chronic schizophrenia, with patients reporting increased levels of relaxation and decreased anxiety upon consumption, even though it might not fully alleviate psychotic thoughts. Another promising application of muscimol is its tranquilizing effect observed in patients, especially in doses below 5 milligrams, which resulted in a generally positive drug experience.

Moreover, the chemical compounds related to muscimol present in Amanita muscaria have demonstrated both antibiotic and antifungal properties, proving effective against a range of bacteria and fungi. In the realm of epilepsy treatment, muscimol played a crucial role in the development of anticonvulsants like tiagabine, which has been marketed as a therapeutic agent. It also shares structural similarities with cycloserine, an antimicrobial agent, albeit one with side effects including somnolence and nervousness.

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PHARMACUTICAL ACTION

Presently, gaboxadol, a compound closely related to muscimol, is undergoing research for its potential role in treating Angelman syndrome. It has shown non-opioid analgesic effects and unique hypnotic properties which might aid in restoring normal sleep patterns. These findings hint at its future use as a treatment for insomnia, given its potential to increase non-REM sleep and enhance delta activity.

On another promising note, other components extracted from Amanita muscaria have displayed anti-inflammatory properties and are being eyed for modern evaluation. In the realm of cancer research, certain compounds isolated from this mushroom have exhibited significant antitumor activity against specific types of cancer in animal models. Moreover, these extracts have showcased a potent ability to inhibit inflammatory pain, indicating a bright future in the field of pain management.

Overall, the research surrounding Amanita muscaria and its components, particularly muscimol, indicates a wealth of opportunities in the treatment and management of various medical conditions, making it a focal point in contemporary medical research.

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THERAPEUTIC EFFECTS OF AMANITA M. MICRODOSING:

- Anxiety Relief: Microdosing Amanita Muscaria may help to alleviate symptoms of anxiety due to its action on the GABA neurotransmitter system.
- Improved Sleep: Some users report improved sleep quality and duration when microdosing Amanita Muscaria.
- Possible Neuroprotective Effects: Muscimol, one of the active compounds in Amanita Muscaria, has shown neuroprotective effects in certain scientific studies.
- Cognitive Enhancement: Users often report increased focus, creativity, and cognitive flexibility while microdosing this mushroom.
- Mood Enhancement: Microdosing Amanita Muscaria may improve overall mood and well-being, reducing feelings of stress and depression.
- Spiritual Connectivity: Some users report enhanced feelings of spirituality or interconnectedness.
- Assistance in Benzodiazepine Withdrawal: Anecdotal reports suggest that microdosing Amanita Muscaria can help manage the withdrawal symptoms from benzodiazepines.
- Reduced Essential Tremors: Preliminary research and anecdotal evidence suggest potential in reducing essential tremors, a benefit for those with conditions like Parkinson's disease.
- Increased Mindfulness: Like other forms of microdosing, Amanita Muscaria can enhance self-awareness and mindfulness, promoting a greater understanding of one's thoughts and emotions.
- Potential Reduction in Chronic Pain: Some users have reported a reduction in chronic pain symptoms while microdosing Amanita Muscaria.

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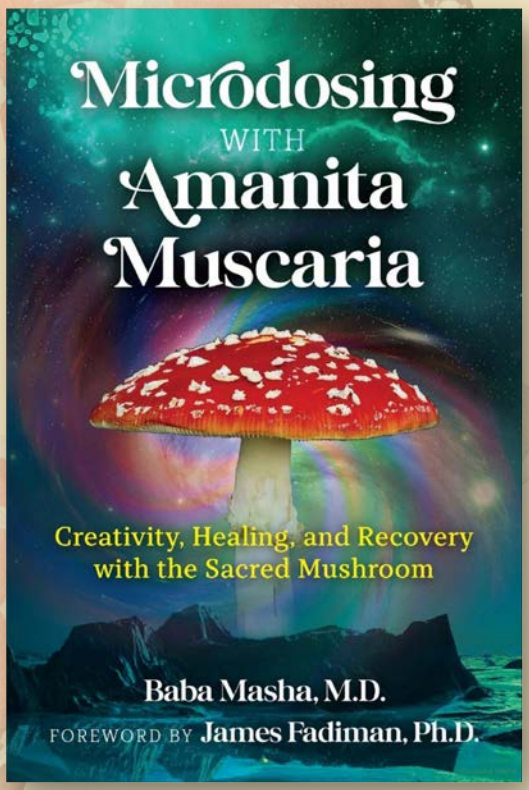
THERAPEUTIC EFFECTS OF AMANITA M. MICRODOSING:

'Microdosing with Amanita Muscaria' by Baba Masha, M.D., is a comprehensive guide to using this iconic mushroom in small, controlled doses. It explores its historical, spiritual, and medicinal aspects, offering insights into safe preparation and dosage management. This book serves as a valuable resource for those interested in the therapeutic potential of Amanita Muscaria.



The following excerpt references a study conducted within the book, detailing the experiences and reported effects observed in the participating subjects:

TABLE 3. DATA SUMMARY EFFECTS OF AM MICRODOSING

CONDITION	POSITIVE EFFECTS	NO RESULTS	NEGATIVE EFFECTS
Allergy (104)	59% (61)	41% (43)	
Antidepressants Subst. (47)	89% (42)	11% (5)	
Appetite (473)	25% (116) increased	37% (177)	37% (180) decreased
Arthritis (477)	70% (333)	30% (144)	31% (151) decreased
Asthenia, Depression (999)	87% (874)	10% (100)	3% (25)
Asthma (26)	54% (14)	46% (12)	
Autism (13)	77% (10)	15% (2)	8% (1)
Burns (22)	77% (17)	22% (5)	3% (25)
Cardiac Arrest Recovery (18)	66% (12)	17% (3)	17% (3)
Cold (186)	78% (145)	20% (38)	8% (1)
Constipation (192)	58% (111)	42% (81)	
Creativity (262)	63% (166)	37% (96)	
Eczema (45)	84% (38)	16% (7)	
Epilepsy (22)	77% (17)	14% (3)	9% (2)
Gingivitis (46)	54% (25)	46% (21)	
Goiter (17)	88% (15)	12% (2)	7% (4)
Heartburn (66)	53% (35) relief	32% (21)	15% (10) increased

- From **Microdosing with Amanita Muscaria' by Baba Masha, M.D**

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CONDITION	POSITIVE EFFECTS	NO RESULTS	NEGATIVE EFFECTS
Hormonal Dysfunction (53)	47% (25)	49% (26)	4% (2)
Hypertension (63)	73% (46)	19% (12)	8% (5)
Libido, Men (384)	43% (165)	52% (198)	5% (21)
Libido, Women (100)	48% (48)	41% (41)	11% (11)
Meat Consumption (485)	Change to vegetarian 12% (60)	57% (274)	31% (151) decreased
Menstrual Cramps (75)	52% (39)	36% (27)	12% (9)
Migraine (110)	65% (72)	35% (38)	8% (5)
Mood Enhancer (981)	88% (868)	12% (113)	
Nail Fungus (245)	53% (130)	47% (115)	
Neuropathic Pain (64)	86% (55)	14% (9)	
Prostatitis (33)	73% (24)	24% (8)	3% (1)
Psoriasis (54)	65% (35)	28% (15)	7% (4)
Rheumatoid Arthritis (23)	91% (21)	9% (2)	
Sleeping Aid (980)	73% (719)	17% (168)	10% (93)
Stroke Recovery (17)	35% (6)*	53% (9)	12% (2)
Sugar Consumption (501)	48% (240) decreased	52% (261)	12% (2)
Swelling (47)	83% (39)	17% (8)	17% (3)
Tongue Plaque (264)	27% (71)	73% (193)	
Warts, Skin Tags (128)	49% (63)	51% (65)	

- From **Microdosing with Amanita Muscaria' by Baba Masha, M.D**

TABLE 3. DATA SUMMARY EFFECTS OF AM MICRODOSING (not discussed in this book)

CONDITION	POSITIVE EFFECTS	NO RESULTS	NEGATIVE EFFECTS
Alzheimer's Disease (11)	73% (8)	18% (2)	9% (1)
Chronic Cystitis (25)	48% (12) stable remission	52% (13)	
COVID (48)	44% (21)	52% (25)	4% (2)
Helicobacter pylori (18)	56% (10) stable remission	33% (6)	11% (2)
HIV (18)	61% (11)	22% (4)	17% (3)
Hunter Syndrome (7)	43% (3)	57% (4)	17% (3)
Multiple Sclerosis (21)	52% (11)	38% (8)	10% (2)
Parkinson's Disease (9)	45% (4)	33% (3)	22% (2)
Postchemotherapy (12)	58% (7)	34% (4)	8% (1)
Chronic Cystitis (25)	48% (12) stable remission	52% (13)	

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POTENTIAL SUPPORT FROM AMANITA MUSCARIA MICRODOSING IN BENZODIAZEPINE WITHDRAWAL AND TERMINATION:

Benzodiazepines, such as Xanax and Valium, are potent anxiety relievers that interact with the GABA neurotransmitter system, proving effective in managing panic attacks, alcohol withdrawals, and other conditions. However, their high addictive potential and potential to induce cognitive decline over prolonged use are notable drawbacks. Suddenly ceasing usage can bring about severe withdrawal symptoms.

An emerging natural alternative is the Amanita Muscaria mushroom, which contains the compounds Ibotenic Acid and Muscimol. When prepared correctly, the toxic Ibotenic Acid transforms into Muscimol, a compound that mirrors the benzos' action on the GABA neurotransmitter receptor sites, offering a potentially safer alternative.

The utilization of Amanita Muscaria requires precise dosing due to its variable potency, necessitating a standardized extract for safe consumption. A growing cohort is turning to it for assistance in benzodiazepine tapering protocols, with some suggesting that Muscimol might even repair damage induced by long-term benzo use.

It is essential, however, to approach a transition from benzos to Amanita Muscaria with medical guidance and proper tapering protocols, as abrupt discontinuation is hazardous. While early indications suggest Amanita Muscaria may not share the addictive qualities of benzos, combining both substances is not recommended. Though still requiring extensive research, anecdotal evidence points towards Amanita Muscaria as a promising aid in benzodiazepine withdrawal, necessitating caution and well-informed dosing.

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RECOMMENDED DOSAGE:

Nature's Pharmatropia Calm caps contains dried Amanita Muscaria (450mg per cap)

German-imported Amanita Muscaria powder, Carefully dried at optimal temperatures to ensure maximum conversion to muscimol, providing an optimal healing and safety profile.

Standard dosing:

2X caps in the morning and or
2x caps, if required, at night

For insomnia:

Take 2- 3 caps in the evening 2hrs before sleep

For stress & anxiety:

Take 2x caps in the morning, and or 2x caps in the evening 2hrs before sleep

DO NOT EXCEED 4 CAPSULES PER DAY
DO NOT CONSUME WITH ALCOHOL

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RESOURCES & REFERENCES

- Baba, Masha. "Microdosing with Amanita Muscaria: Creativity, Healing, and Recovery with the Sacred Mushroom"
- Bowden, K., A. C. Drysdale, and G. A. Mogey. "Constituents of Amanita Muscaria." Nature 206 (1965): 1359–60.
- Catalfomo, P., and C. H. Eugster. "L'Amanita Muscaria: Connaissance Actuelle de Ses Principes Actifs." Bulletin des Stupefiants 22 (1970): 35–43.
- Dutta, S., S. Ray, and K. Nagarajan. "Glutamic Acid Analogues Used as Potent Anticancer: A Review." Der Pharma Chemica 2, no. 2 (2011): 263–72.
- Festi, F., and A. Bianchi. "Amanita muscaria." Integration Journal of Mind-Moving Plants and Culture, no. 2–3 (1992): 79–89.
- Frydenvang, K., and B. Jensen. "Structures of Muscarine Picrate and Muscarine Tetraphenylborate." Acta Crystallographica C49, no. 5 (1993): 985–90.
- Good, R., G. F. Müller, and C. H. Eugster. "Isolation and Characterization of Premuscimol and Muscazone from Amanita muscaria (L. ex Fr.). Hooker." Helvetica Chimica Acta 48 (1965): 927–30.
- Johnston, G. A. "Muscimol as an Ionotropic GABA Receptor Agonist." Neurochemical Research 39, no. 10 (2014): 1942–47
- Kanasaki, H., T. Tumurbaatar, A. Oride, T. Hara, H. Okada, and S. Kyo. "Gamma-Aminobutyric AcidA Receptor Agonist, Muscimol, Increases KiSS-1 Gene Expression in Hypothalamic Cell Models." Reproductive Medicine and Biology 16, no. 4 (2017): 386–91.
- Kiho, T., M. Katsurawaga, K. Nagai, S. Ukai, and M. Haga. "Structure and Antitumor Activity of a Branched (1→3)-β-d-glucan from the Alkaline Extract of Amanita muscaria." Carbohydrate Research 224, no. 7 (1992): 237–43.

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RESOURCES & REFERENCES

- Michelot, D., and L. M. Melendez-Howell. “Amanita muscaria: Chemistry, Biology, Toxicology, and Ethnomycology.” Mycological Research 107, no. 3 (2003): 131–46.
- Nielsen, E. Ø., A. Schousboe, S. H. Hansen, and P. Krogsgaard-Larsen. “Excitatory Amino Acids: Studies on the Biochemical and Chemical Stability of Ibotenic Acid and Related Compounds.” Journal of Neurochemistry 45, no. 3 (1985): 725–31.
- Obermaier, S., and M. Müller. “Ibotenic Acid Biosynthesis in the Fly Agaric Is Initiated by Glutamate Hydroxylation.” Angewandte Chemie International Edition 59, no. 30 (2020): 12432–35.
- Snodgrass, S. (1978). "Use of 3H-muscimol for GABA receptor studies." Nature 273(5661): 392–394.
- Sternau, L., D. Lust, J. Ricci, R. Ratcheson (1989). "Role for γ-aminobutyric acid in selective vulnerability in gerbils." Stroke 20(2): 281–287.
- Stintzing, F. (2007). "Pigments of fly agaric (Amanita muscaria)." Zeitschrift Für Naturforschung 62(11–12): 779–785.
- Tatsuta, M., H. Iishi, M. Baba, H. Uehara, A. Nakaizumi, H. Taniguchi (1992). "Protection by muscimol against gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in spontaneously hypertensive rats." International Journal of Cancer 52(6): 924–927.
- Takemoto, T., T. Nakajima, R. Sakuma (1964). "Isolation of a flycidal constituent ‘ibotenic acid’ from Amanita muscaria and A. pantherina." Journal of the Pharmacological Society of Japan 84: 1186–1188.
- Tamminga, C. A., J. W. Crayton, T. N. Chase. “Improvement in Tardive Dyskinesia after Muscimol Therapy.” Archives of General Psychiatry 36, no. 5 (1979): 595–98.

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