

Mycotherapy for Fertility+

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Learning Outcomes

By the end of this session you will:

- Recognise key mushrooms relevant to reproductive health.
- Understand their mechanisms in fertility, pregnancy & postpartum care.
- Gain confidence in recommendations (doses, duration, cautions).
- Know what to look for in quality products.

Why Mushrooms?

Tradition meets Science

- Ancient allies in TCM: vitality, longevity, fertility.
- Modern pharmacology: adaptogens, antioxidants, immune modulators.
- Safe, broad-acting, synergistic with acupuncture.

Fertility Challenges

Common issues seen in clinic:

- Oxidative stress (egg/sperm quality)
- Hormonal imbalance (PCOS, low testosterone, luteal defects)
- Immune dysregulation (implantation failure, endometriosis)
- Stress, sleep, and adrenal exhaustion

Meet the Mushrooms

Key mushrooms for supporting fertility+

- **Reishi (*Ganoderma lucidum*)** – “Mushroom of Immortality”
- **Cordyceps (*C. sinensis* / *C. militaris*)** – stamina & reproductive energy
- **Maitake (*Grifola frondosa*)** – metabolic & ovulation support
- **Shiitake (*Lentinula edodes*)** – nutritional antioxidant, antifungal
- **Turkey Tail (*Trametes/Coriolus versicolor*)** – immune regulation
- **ABM/Thistle/Sun (*Agaricus Blazei*)** – immunomodulating, anti-proliferative

Reishi, *Ganoderma lucidum*

For hormonal balance, inflammation and oxidation, Shen

- Key active compounds: Triterpenes (GLT): Ganoderic acids, polysaccharides (GLP), beta-D-glucans
- Modulates HPA & HPG axes
- Lowers testosterone, ↑ estradiol (PCOS, ovulation)
- Antioxidant protection in reproductive tissues
- Reduces stress, improves sleep (calms the Shen)
- **Recommended dosage range:** Extract 500–1500 mg/day; 2–3 months preconception.

Cordyceps, *Cordyceps Sinensis/Militaris*

For vitality, energy, virility, and gamete health

- Key active compounds: Cordycepin, adenosine, beta-D-glucans.
- ↑ Testosterone, sperm count, motility
- Enhances ovarian steroidogenesis
- Improves ATP + mitochondrial function
- Libido & stamina support
- **Recommended dosage range:** 1000–2000 mg/day extract, 2–3 months minimum.

Maitake

For metabolic regulation, and ovulation

- Key active compounds: D-fraction polysaccharides, beta-D-glucans.
- Ovulation induction in PCOS
- MM and fertility notes:
- Works synergistically with clomiphene
- Improves insulin resistance (AMPK activation)
- Reduces chronic low-grade inflammation
- **Recommended dosage range:** extracts (look for D-fraction) ~ 500–1000 mg/day.

Shiitake, Turkey Tail & ABM - Allies

Lentinula eddies & Coriolus versicolor/trametes

- **Shiitake:** rich in B vitamins, D2, antioxidants
- **Turkey Tail:** immune modulation (NK cells, cytokines)
- **ABM:** immune modulation (Th1/2 balance) anti-proliferative - fibroids (benign tumours)
- Indirect fertility benefits: infection defence, liver support, endometrial receptivity
- Support roles: improve overall reproductive environment.
- When to use: immune dysregulation, recurrent infections, poor luteal phase, fibroids.

Cautions & Contraindications

Key considerations

- Mushroom allergy
- Additive effects: anticoagulants, hypoglycaemic drugs
- Surgery: stop high-dose Reishi before/after
- Pregnancy/breastfeeding: avoid extracts; use whole powders cautiously

Pregnancy & Postpartum

Can mushrooms be used safely?

- Use low-dose whole mushroom powders, avoid high-dose extracts and cordyceps
- Support immunity & stress: Shiitake, Turkey Tail, Reishi (low-dose)
- Postpartum: Cordyceps for fatigue recovery; Reishi for sleep & mood

Quality Matters

Look for:

- Fruiting body extracts (not mycelium on grain “MOG”)
- Standardised fungal β -D-glucan % (vs “total polysaccharides/ total β -glucan)
- Dual extraction
- Organic, heavy-metal tested
- Transparent sourcing & extraction methods

Clinical Integration

How to add mushrooms to your practice

- Combine with acupuncture protocols for fertility prep
- Allow minimum 3 months preconception use
- Tailor mushroom to patient pattern:
- Reishi → stress/PCOS
- Cordyceps → gamete quality, low libido, sperm health
- Maitake → PCOS, insulin resistance
- Shiitake/Turkey Tail → immune, infection, candida, general support
- ABM → immune modulation, fibroids

Summary

Recap

- Mushrooms regulate stress, hormones, inflammation, metabolism and immunity.
- Growing evidence for Reishi, Cordyceps, Maitake in fertility.
- Supportive roles in pregnancy & postpartum.
- Safe when high-quality and used correctly.

References

- <https://pubmed.ncbi.nlm.nih.gov/24063008/#:~:text=Cordyceps%20sinensis%20increases%20hypoxia%20tolerance,in%20human%20lung%20epithelial%20cells>
- <https://pubmed.ncbi.nlm.nih.gov/21034160/>
- <https://pubmed.ncbi.nlm.nih.gov/24716152/>
- <https://pubmed.ncbi.nlm.nih.gov/36734035/>
- <https://pubmed.ncbi.nlm.nih.gov/34444885/>
- <https://pubmed.ncbi.nlm.nih.gov/31418664/>
- <https://pubmed.ncbi.nlm.nih.gov/34211003/>
- Chen, X. et al. (2019). "Ganoderma lucidum Modulates Hypothalamic-Pituitary-Gonadal Axis in Experimental Models.", *Phytotherapy Research*, 33(8), pp.2116-2128.
- Acevedo-Rodriguez, A. Kauffman, A.S. Cherrington, B.D. et al. (2018). "Emerging insights into hypothalamic-pituitary-gonadal axis regulation and interaction with stress signalling", *Journal of Neuroendocrinology*, 30(10).
- Chen, Y. Chen, Y. Pan, B.S. et al. (2017). "Functional study of Cordyceps sinensis and cordycepin in male reproduction: A review", *Journal of Food and Drug Analysis*, 25(1), pp.197-205.
- Chen, J. T. et al. (2010). "Effect of Grifola frondosa on insulin resistance in women with polycystic ovary syndrome.", *Experimental and Therapeutic Medicine*, 1(5), pp.787-792.
- Jang, D. Lee, E. Lee, S. et al. (2022). "System-level investigation of anti-obesity effects and the potential pathways of Cordyceps militaris in ovariectomized rats", *BMC Complement Medicine Therapies*, 22(1).
- Kim, H.W. et al. (2019). "Clinical Implications of Ganoderma lucidum in Reproductive Health: A Systematic Review.", *Complementary Therapies in Medicine*, 45, pp.67-75.
- Kusama, K. Miyagawa, M. Ota, K. et al. (2020). "Cordyceps militaris Fruit Body Extract Decreases Testosterone Catabolism and Testosterone-Stimulated Prostate Hypertrophy", *Nutrients*, 13(1).
- Lee, J. H. et al. (2021). "Anti-inflammatory Effects of Ganoderma Polysaccharides on Reproductive Health.", *Inflammation Research*, 70(2), pp.189-202.
- Li, Y. Liang, W. Han, Y. et al. (2022). "Triterpenoids and Polysaccharides from Ganoderma lucidum Improve the Histomorphology and Function of Testes in Middle-Aged Male Mice by Alleviating Oxidative Stress and Cellular Apoptosis", *Nutrients*, 14(22).
- Liao, L. H. et al. (2019). "A preliminary review of studies on adaptogens in relation to men's reproductive health.", *Journal of Ethnopharmacology*, 238.
- Liu, J. et al. (2020). "Antioxidant Activity of Ganoderma (Lingzhi) Triterpenoids and Polysaccharides.", *International Journal of Molecular Sciences*, 21(12).
- Mayell, M. (2001). "Maitake extracts and their potential therapeutic applications." *Alternative Medicine Review*, 6(1), pp.48-60.
- ba, K. et al. (2013). "Maitake mushroom extracts and their potential anti-diabetic properties.", *Journal of Medicinal Food*, 16(2), pp.127-133.
- Shi, L. et al. (2017). "Lipid Peroxidation Inhibition by Ganoderic Acids in Reproductive Tissues.", *Journal of Ethnopharmacology*, 206, pp.45-54.
- Stamets, P. (2005). *Mycelium Running: How Mushrooms Can Help Save the World*. Ten Speed Press.
- Wang, Y. & Gao, W. (2018). "Stress Hormone Regulation by Ganoderma Triterpenoids.", *Molecular Medicine Reports*, 18(4), pp.3479-3487.

Q & A

Thank you for your attention

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