

# Cold&Flu

15 vegetable capsules / Code FE2287



**Cold&Flu** is a unique formula based on 10 vegetable ingredients that act synergistically. It provides plant extracts such as andrographis (30% andrographolids), astragalus, echinacea, elderberry, rosemary and myrrh, reinforced with 40% standardized fungal extracts of maitake, shiitake and reishi polysaccharides.

**Health Claims (Regulation EU N° 432/2012):** *Andrographis, astragalus, elderberry, echinacea, rosemary and reishi contribute to the normal function of the immune system. Andrographis and echinacea contribute to the normal function of the respiratory tract.*



**FORMAT:** 15 vegetable capsules

## FORMULA

**Ingredients:** Common andrographis (*Andrographis paniculata*) areal parts extract, astragalus (*Astragalus membranaceus*) root extract, elderberry (*Sambucus nigra*) fruit, echinacea (*Echinacea purpurea*) root extract, rosemary (*Rosmarinus officinalis*) leaf extract, myrrh (*Commiphora myrrha*) resin, maitake (*Grifola frondosa*) extract, reishi (*Ganoderma lucidum*) extract, shiitake (*Lentinula edodes*) extract, anticaking agent (magnesium salts of fatty acids and silicon dioxide), *Berberis aristata* bark extract, vegetable capsule (glazing agent: hydroxypropylmethylcellulose; humectant: purified water).

<b>Nutritional information:</b>	<b>1 capsule</b>
Andrographis ( <i>Andrographis paniculata</i> ) (30% andrografólidos)	200 mg
Astrágalo ( <i>Astragalus membranaceus</i> ) (3% astragalósidos)	190 mg
Saúco ( <i>Sambucus nigra</i> )	50 mg
Equinácea ( <i>Echinacea purpurea</i> ) (4% polifenoles)	30 mg
Romero ( <i>Rosmarinus officinalis</i> ) (5% ácido carnósico)	30 mg
Mirra ( <i>Commiphora myrrha</i> )	30 mg
Maitake ( <i>Grifola frondosa</i> ) (40% polisacáridos)	10 mg
Reishi ( <i>Ganoderma lucidum</i> ) (40% polisacáridos)	10 mg
Shiitake ( <i>Lentinula edodes</i> ) (40% polisacáridos)	10 mg
Berberina (de <i>Berberis aristata</i> )	1,75 mg

## Cautions:

Do not use if you are pregnant or breast-feeding. Consult a health-care practitioner prior to use if you are being treated with medication (immunosuppressants, sedatives, anticoagulants) or if you have a special medical condition (autoimmune disorder, diabetes).

## Recommended daily dose:

1 capsule daily with food. Consult a health-care practitioner for use beyond 10 days. Do not exceed the stated recommended daily dose.

## Indications and uses:

- Helps relieve cold and flu symptoms
- Shortens the duration and reduces the severity of symptoms.

## DETAILS:

**Cold&Flu** is designed to strengthen the body's immune response as well as provide direct antiviral and antibacterial activity against seasonal conditions such as colds and flus. It contains a broad spectrum of high-potency plant extracts to improve resistance to these seasonal conditions.

Andrographis, astragalus, reishi, maitake and shiitake act as tonics to the immune system. Echinacea, elderberry, reishi and shiitake increase antiviral immunity. myrrh, rosemary and berberine have antimicrobial effects. All of these act in synergy to reduce the symptoms of seasonal respiratory conditions.

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## INGREDIENTS:

**ANDROGRAPHIS:** A native plant to the Indian subcontinent and cornerstone of Ayurvedic medicine. Our standardized extract contains 30% andrographolides, which exert a therapeutic action on the immune system <sup>(1)</sup>. Clinical trials show a significant reduction in the severity of symptoms and the duration of the common cold and upper respiratory tract infections <sup>(2-5)</sup>.

**ASTRAGALUS:** Astragalosides are active compounds capable of activating immune cells to fight bacterial and viral infections <sup>(6)</sup>. Astragalus extract reduces upper respiratory tract infections <sup>(7-8)</sup>.

**ELDERBERRY:** Clinical trials show that elderberry reduces the duration of symptoms by an average of 4 days compared to placebo. It's also effective against bacterial respiratory tract infections from the flu <sup>(9-11)</sup>.

**ECHINACEA:** Diverse studies have shown it can reduce the possibility of developing the common cold and can also reduce its duration. And thanks to its immune-modulating, antiviral and anti-inflammatory properties, it also reduces the risk of recurring respiratory tract infections <sup>(12-14)</sup>.

**ROSEMARY:** Rosemary contains carnosic acid, which has antioxidant and antimicrobial properties <sup>(15-16)</sup>.

**MYRRH:** The resin myrrh helps reduce excessive mucus production in the lungs and the upper respiratory tract. It also possesses antimicrobial, anti-inflammatory and analgesic properties <sup>(17-18)</sup>.

**MAITAKE:** A mushroom traditionally used in Eastern medicine for its immune-favouring properties, it also increases antibody production in response to vaccination against the flu virus, and reduces common cold symptoms <sup>(19-21)</sup>.

**REISHI:** This mushroom is well known for its immune-modulating capability, which contributes to the body's ability to fight infections. In addition to this immune-modulating capability, it also has anti-inflammatory activity that helps with the treatment of allergies and the flu <sup>(22-25)</sup>.

**SHIITAKE:** Shiitake has been traditionally used to strengthen the immune system. Lentinan, a beta-glucan from shiitake, has antiviral properties and may have protective effects against the flu virus <sup>(26-28)</sup>.

**BERBERINE:** This potent antimicrobial alkaloid is widely used in Ayurvedic medicine. Berberine has been shown to exert antibacterial effects in gram-positive bacteria (*S. aureus*, *B. subtilis*), gram-negative bacteria (*E. coli*, *P. aeruginosa*) and yeasts (*C. albicans*, *C. glabrata*) <sup>(33)</sup>. Berberine also shows activity against different viruses including viruses of the respiratory tract <sup>(29-33)</sup>.

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## References:

- 1) Dey, Yadu Nandan, et al. "Phytopharmacological review of *Andrographis paniculata* (Burm. f) Wall. ex Nees." *International Journal of Nutrition, Pharmacology, Neurological Diseases* 3.1 (2013): 3. Julio 2018 FrenesGrip Cod. E2287 – 15 cápsulas
- 2) Saxena, R. C., et al. "A randomized double blind placebo controlled clinical evaluation of extract of *Andrographis paniculata* (KalmCold™) in patients with uncomplicated upper respiratory tract infection." *Phytotherapy Research* 17.3-4 (2010): 178-185.
- 3) Spasov, A. A., et al. "Comparative controlled study of *Andrographis paniculata* fixed combination, Kan Jang® and an echinacea preparation as adjuvant, in the treatment of uncomplicated respiratory disease in children." *Phytotherapy Research* 18.1 (2004): 47-53.
- 4) Coon, Joanna Thompson, and Edzard Ernst. "*Andrographis paniculata* in the treatment of upper respiratory tract infections: a systematic review of safety and efficacy." *Planta medica* 70.04 (2004): 293-298.
- 5) Hu, Xiao-Yang, et al. "*Andrographis paniculata* (Chuān Xīn Lián) for symptomatic relief of acute respiratory tract infections in adults and children: A systematic review and meta-analysis." *PloS one* 12.8 (2017): e0181780.
- 6) Ren, Shuang, et al. "Pharmacological effects of Astragaloside IV: a literature review." *Journal of Traditional Chinese Medicine* 33.3 (2013): 413-416.
- 7) Zou, Chuan, et al. "Astragalus in the prevention of upper respiratory tract infection in children with nephrotic syndrome: evidence-based clinical practice." *EvidenceBased Complementary and Alternative Medicine* 2013 (2013).
- 8) Su, Guobin, et al. "Oral Astragalus (Huang qi) for preventing frequent episodes of acute respiratory tract infection in children." *The Cochrane database of systematic reviews* 12 (2015).
- 9) Zakay-Rones, Z., et al. "Randomized study of the efficacy and safety of oral elderberry extract in the treatment of influenza A and B virus infections." *Journal of International Medical Research* 32.2 (2004): 132-140.
- 10) Kong, Fan-kun. "Pilot clinical study on a proprietary elderberry extract: efficacy in addressing influenza symptoms." *Online Journal of Pharmacology and Pharmacokinetics* 5 (2009): 32-43.
- 11) Krawitz, Christian, et al. "Inhibitory activity of a standardized elderberry liquid extract against clinically-relevant human respiratory bacterial pathogens and influenza A and B viruses." *BMC complementary and alternative medicine* 11.1 (2011): 16.
- 12) Shah, Sachin A., et al. "Evaluation of echinacea for the prevention and treatment of the common cold: a meta-analysis." *The Lancet infectious diseases* 7.7 (2007): 473-480.

- 13) Schapowal, Andreas, Peter Klein, and Sebastian L. Johnston. "Echinacea reduces the risk of recurrent respiratory tract infections and complications: a metaanalysis of randomized controlled trials." *Advances in therapy* 32.3 (2015): 187-200.
- 14) Rondanelli, Mariangela, et al. "Self-Care for Common Colds: The Pivotal Role of Vitamin D, Vitamin C, Zinc, and Echinacea in Three Main Immune Interactive Clusters (Physical Barriers, Innate and Adaptive Immunity) Involved during an Episode of Common Colds—Practical Advice on Dosages and on the Time to Take These Nutrients/Botanicals in order to Prevent or Treat Common Colds." *Evidence-Based Complementary and Alternative Medicine* 2018 (2018).
- 15) Bernardes, Wagner A., et al. "Antimicrobial activity of *Rosmarinus officinalis* against oral pathogens: relevance of carnosic acid and carnosol." *Chemistry & biodiversity* 7.7 (2010): 1835-1840.
- 16) Hameed, Imad Hadi, and Ghaidaa Jihadi Mohammed. "Phytochemistry, Antioxidant, Antibacterial Activity, and Medicinal Uses of Aromatic (Medicinal Plant *Rosmarinus officinalis*)." *Aromatic and Medicinal Plants-Back to Nature*. InTech, 2017.
- 17) Shen, Tao, et al. "The genus *Commiphora*: a review of its traditional uses, phytochemistry and pharmacology." *Journal of ethnopharmacology* 142.2 (2012): 319-330.
- 18) Germano, Antonio, et al. "A pilot study on bioactive constituents and analgesic effects of MyrLiq®, a *Commiphora myrrha* extract with a high furanodiene content." *BioMed research international* 2017 (2017).
- 19) Wesa, Kathleen M., et al. "Maitake mushroom extract in myelodysplastic syndromes (MDS): a phase II study." *Cancer Immunology, Immunotherapy* 64.2 (2015): 237-247.
- 20) Tsao, Yao-Wei, et al. "Characterization of a novel maitake (*Grifola frondosa*) protein that activates natural killer and dendritic cells and enhances antitumor immunity in mice." *Journal of agricultural and food chemistry* 61.41 (2013): 9828-9838.
- 21) Nishihira, Jun, et al. "Maitake mushrooms (*Grifola frondosa*) enhances antibody production in response to influenza vaccination in healthy adult volunteers concurrent with alleviation of common cold symptoms." *Functional Foods in Health and Disease* 7.7 (2017): 462-482.
- 22) Tasaka, K., et al. "Anti-allergic constituents in the culture medium of *Ganoderma lucidum*.(I) Inhibitory effect of oleic acid on histamine release." *Inflammation Research* 23.3 (1988): 153-156.
- 23) Tasaka, K., et al. "Anti-allergic constituents in the culture medium of *Ganoderma lucidum*.(II) The inhibitory effect of cyclooctasulfur on histamine release." *Agents and Actions* 23.3-4 (1988): 157-160.
- 24) Powell, Martin. "The use of *Ganoderma lucidum* (Reishi) in the management of histamine-mediated allergic responses." *Townsend Letter: The Examiner of Alternative Medicine* 274 (2006): 78-82.
- 25) Zhu, Qinchang, et al. "Anti-influenza effects of *Ganoderma lingzhi*: An animal study." *Journal of Functional Foods* 34 (2017): 224-228.
- 26) Muszyńska, Bożena, et al. "Lentinula edodes (Shiitake)—biological activity." *Medicina Internacia Revuo-International Medicine Review* 108 (2017): 189-195.
- 27) Ren, Guangming, et al. "Structural characterization and antiviral activity of lentinan from *Lentinus edodes* mycelia against infectious hematopoietic necrosis virus." *International journal of biological macromolecules* 115 (2018): 1202-1210.
- 28) Zhang, Qian, et al. "Effect of edible fungal polysaccharides on improving influenza vaccine protection in mice." *Food and Agricultural Immunology* 28.6 (2017): 981-992.
- 29) Sahibzada, Muhammad Umar Khayam, et al. "Berberine nanoparticles with enhanced in vitro bioavailability: characterization and antimicrobial activity." *Drug design, development and therapy* 12 (2018): 303.
- 30) Wang, Huiqiang, et al. "Berberine inhibits enterovirus 71 replication by downregulating the MEK/ERK signaling pathway and autophagy." *Virology journal* 14.1 (2017): 2.
- 31) Shin, Han-Bo, et al. "Inhibition of respiratory syncytial virus replication and virus-induced p38 kinase activity by berberine." *International immunopharmacology* 27.1 (2015): 65-68.
- 32) Enkhtaivan, Gansukh, et al. "Discovery of berberine based derivatives as anti-influenza agent through blocking of neuraminidase." *Bioorganic & medicinal chemistry* 25.20 (2017): 5185-5193.
- 33) Xie, Qian, et al. "Efficacy of berberine, an antimicrobial plant alkaloid, as an endodontic irrigant against a mixed-culture biofilm in an in vitro tooth model." *Journal of endodontics* 38.8 (2012): 1114-1117.