

Coriolus Versicolor SAP

Science-based hot-water mushroom extract for optimal health and immune support

Coriolus Versicolor SAP is a hot water-extracted medicinal mushroom that helps support healthy immune function and is a source of antioxidants. *Coriolus versicolor* is one of the most extensively researched of all the medicinal mushrooms.^[1] Two of the extracts within *Coriolus versicolor* are PSK and PSP, both of which have clinical trials on a variety of cancers including gastric/colorectal, lung, and breast cancers, with favorable results.^[1] *Coriolus* has also demonstrated immune activation on patients with chronic fatigue syndrome with improvements in NK cell activity.^[1]

ACTIVE INGREDIENTS

Each vegetable capsule contains:

Coriolus versicolor (*Trametes versicolor*) extract,
55% polysaccharides providing 50% β -glucans 500 mg

Note: Polysaccharide and β -glucan content may vary from lot to lot.

This product is non-GMO.

Contains no: Gluten, soy, wheat, corn, eggs, dairy, yeast, citrus, preservatives, artificial flavour or colour, starch, or sugar.

Coriolus Versicolor SAP contains 60 or 120 capsules per bottle.

DIRECTIONS FOR USE

Take 1 capsule three times daily or as directed by your healthcare practitioner. To avoid digestive upset, take with food/a meal.

INDICATIONS

Coriolus Versicolor SAP:

- Can be used to help support healthy immune function.
- Can be used as a source of antioxidants.
- May be helpful during treatment of and recovery from a variety of types of cancers.
- May help inactivate herpes simplex infections.
- Works as a prebiotic to help maintain intestinal health.

CAUTIONS AND WARNINGS

Consult a healthcare practitioner prior to use if you are pregnant or breast-feeding.

PURITY, CLEANLINESS, AND STABILITY

All ingredients listed for all **Coriolus Versicolor SAP** lot numbers have been tested by a third-party laboratory for identity, potency, and purity.



Scientific Advisory Panel (SAP):
adding nutraceutical research
to achieve optimum health



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Coriolus versicolor is a medicinal mushroom that has been heavily studied in a variety of different types of cancers.^[1] Polysaccharide K (PSK) and polysaccharide peptide (PSP) are both complexes consisting predominantly of polysaccharides and proteins which are soluble in water but not in ethanol, therefore ensuring the proper extraction method used is very important.^[1] PSK has been shown to boost immune cell production, improve side effects from chemotherapy and radiotherapy, and enhance tumour infiltration by dendritic and cytotoxic cells to extend survival in cancers of the stomach, colon, uterus, and lung in combination with conventional treatment.^[1] PSK has also demonstrated the ability to enhance the activity of both glutathione peroxidase and superoxide dismutase.^[1] PSP helps enhance immune status in patients with cancer of the lung, cervix, ovary, stomach, or esophagus.^[1]

CORIOLUS AND CANCERS

PSP from *Coriolus versicolor* has demonstrated both antitumour and immunomodulating effects when used as an adjuvant to chemotherapy.^[2] Researchers in this study were hoping to determine the mechanism by which PSP has its effect.^[2] A comparison was made between PSP treatments with and without prior incubation in phytohaemagglutinin (PHA; a process often used in experimentation with the immune population).^[2] Using flow cytometry without PHA treatment, researchers determined the proliferative capacity of PSP on a variety of different immune populations in peripheral blood mononuclear cells.^[2] PSP was found to significantly increase the number of monocytes (CD14⁺/CD16⁻), whereas proliferations of T cells, NK, and B cells did not experience significant changes.^[2] The ability to stimulate monocyte and macrophage function with PSP may be an effective intervention in targeting tumours.^[2]

One of the leading causes of cancer deaths is non-small cell lung cancer (NSCLC), and over 60% of patients present with advanced stages.^[3] Researchers completed a 28-day double-blind, placebo-controlled, randomized trial to evaluate the effect of PSP on patients with NSCLC who had completed conventional treatment.^[3] Thirty-four patients with NSCLC were randomized into either treatment with PSP or control for 28 days.^[3] At the end of the trial, patients in the treatment group had significant improvements in blood leukocyte and neutrophil counts, serum IgG and IgM, as well as percentage body fat, which were not seen in the control group.^[3] There was no improvement seen in the NSCLC-related symptoms in the treatment group; however, there were significantly less patients that had to withdraw because of disease progression compared to the control group (5.9% versus 23.5%, respectively).^[3] There were no adverse reactions reported attributed to the trial medications.^[3] The authors concluded that PSP treatment appears to be associated with a slower deterioration in patients with advanced NSCLC.^[3]

Researchers looked at patients with stage-III uterine and cervical cancers in combination with radiotherapy, which were given PSK (3–6 g/d).^[4] Patients demonstrated enhanced survival and increased sensitivity of the cancers to radiotherapy.^[1] In another trial with cervical cancer patients, all patients received the same dose of radiotherapy, with the treatment group also receiving PSK. The treatment group demonstrated an increase in clearance of cancer cells of 36% versus 11% in controls.^[1] In another study using the *Coriolus* biomass at 3 g/d, researchers looked at the regression rate in LSIL lesions and found the treatment groups regression was 72.5% compared to 47.5% in controls. It also increased the clearance of high-risk HPV strains from 8.5% in controls to 91.5% in the treatment group.^[1]

In a systematic review and meta-analysis from randomized, placebo-controlled, double-blind trials, researchers wanted to assess the efficacy of *Coriolus* for survival in cancer patients.^[4] Thirteen clinical trials were included in the analysis.^[4] Findings demonstrated that

Coriolus versicolor use results in a significant survival advantage compared with standard conventional treatment on its own.^[4] Patients who received *Coriolus* showed a 9% absolute reduction in 5-year mortality, resulting in one additional patient alive for every 11 patients treated.^[4] Patients with breast, colorectal, or gastric cancer who had been treated with chemotherapy showed the best results in combination with *Coriolus* in terms of 5-year survival rates.^[4]

CORIOLUS AND HERPES

Herpes simplex virus (HSV) causes herpes genitalis and recurrent herpes labialis.^[5] Researchers wanted to explore the mechanisms by which PSK exerts a protective effect against HSV infection.^[5] HSV-1 GC⁺ was inactivated by PSK in a dose-dependent manner of concentrations of PSK and virus titers.^[5] PSK at concentrations as low as 0.31 mg/ml was shown to inactivate the infectivity of HSV-1 GC⁺ (lab-cultured strain). Inactivation required at least 30 min of incubation at 37 °C, with maximal inactivation observed at 60 min incubation time. Clinically isolated strains of HSV-2 were also inactivated by PSK, but clinically isolated strains of HSV-1 were resistant to PSK.^[5] HSV treated with PSK maintained its ability to absorb the cell membrane, but did not synthesize viral proteins.^[5] The data suggests there is a biological difference between HSV-1 and HSV-2, and also suggests that PSK may be able to inactivate HSV in lesions at peripheral sites of recurrent herpes.^[5]

CORIOLUS AND MICROBIOME

Microbial flora in the intestines of humans plays a critical role in the maintenance of intestinal health as well as in the pathophysiology of several disorders, including inflammatory bowel disease, clostridium difficile infections, and antibiotic-associated diarrhea.^[6] Prebiotics can confer a health benefit by beneficial effects on the intestinal microbiome, whereas antibiotics can disrupt the microbiome, leading to side effects.^[6] Researchers compared the effects of the prebiotic PSP from *Trametes versicolor* (another name for *Coriolus versicolor*) to those of the antibiotic amoxicillin on the human gut microbiome.^[6] Twenty-four healthy volunteers were randomized into three groups: PSP, amoxicillin, or control.^[6] Stool specimens were analyzed over eight weeks. The PSP group showed clear and consistent microbiome changes, consistent with its activity as a prebiotic, and strong microbiome clustering was noted, whereas the baseline microbiomes tended to remain stable.^[6] Amoxicillin treatment caused a significant change in the microbiome, with the most notable change being an increase in *Escherichia/Shigella*, which persisted to the end of the study (42 days after antibiotic therapy stopped). Researchers concluded that microbiomes of healthy individuals show substantial diversity, but remain stable over time. They also noted that amoxicillin alters the microbiome and recovery from this disruption can take several weeks, but that PSP acts as a prebiotic to modulate human intestinal microbiome composition.^[6]

REFERENCES

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