



## Coriolus versicolor

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### Name

*Coriolus versicolor*, Turkeytail, Yun-Zhi (China), Kawaratake (Japan) (4). Formerly: *Trametes versicolor*, *Polyporus versicolor*, *Boletus versicolor*, *Polystictus versicolor* (5).

### Family

*Polyporaceae*

### Botanical Description

White underbelly has thousands of pores instead of gills that do not discolor when you scratch them (4 & 5). The fan-shaped fruiting bodies resemble a spread out turkey tail and are variously colored. They overlap in groups on dead trees. The top of the mushroom is zoned in browns, whites, grays, or blues and has hairy bands (5).

### Parts Used

Fruiting bodies, Mycelia grown on grain.

### Habitat

Rainy or wet areas, near river banks, etc. Temperate woody zones of North America, Asia, and Europe (5).

### Taste

Unavailable

### Temperature

Unavailable

### Channels

Tonifies the kidney and liver. Unclear if this corresponds to those meridians.

### Constituents

B-glucan-proteins (Coriolan, PSK): anti-tumor, antiviral, immunomodulating.

- *Polysaccharide K (PSK)* is 30% polysaccharides, 6% nitrogen, and 15% protein (3).

Ergosterol (provitamin D2) derivatives: antitumor

Polysaccharopeptide (PSP): antiviral

### Actions

Anti-tumor, Anti-microbial, Immunomodulating, Anti-oxidant. Also recently discovered to be anti-malarial (6).

### Indications and Effects

Cancer (cervical, breast, lung, gastric, colon, sarcoma, carcinoma, esophageal, etc.) (4), Immunodeficiency (4), Hepatitis B and C (2), and Malaria (6).

### Pharmacodynamics

PSK fights cancers and tumors by inhibiting the growth of cancer cells and by "stimulating a host mediated response." Natural Killer cells are also promoted to enhance the immune system. It is often used in conjunction with chemotherapy to increase cancer survival rates. PSP is being proposed as an inhibitor of HIV replication based on an *in vitro* study (4).

PSK has also demonstrated itself to activate interferon production (2). *Coriolus* has also been found to regenerate damaged bone marrow, increase energy levels and offer pain relief in cancer patients (1).

### Contraindications

No information uncovered (see [Safety](#) for note on long-term use).

### Combinations

With PSK there was an increase in breast cancer survival rate when combined with "ftorafur chemotherapy" after surgery and mitomycin C (7).

There was an observable drop in white blood cell count following three courses of chemotherapy when PSP was used as a pretreatment in combination with vincristine, cyclophosphamide, and 4' epidoxorubicin. Furthermore there were additional immunosuppressant effects noted when PSP was taken with cyclophosphamide such as reduced lymphocyte proliferation, Natural Killer cell function, white blood cell production, and the growth of the thymus and spleen (7).

### Preparations and Doses

There was no available information on preparations and dosages of the mushroom in whole form. However, the studies used preparations of PSP and PSK in their trials. PSK is a commercial drug (Krestin) derived from hot water extractions of "mycelial cultures" rather than the actual mushroom (4). One particular trial involved dosing PSK orally at 3 grams per day for 3 months for gastric cancer and patients displayed an average higher survival rate (3). I have yet to find an herb company supplying it in any form. Usually it is used as part of a treatment regimen where the patient takes the dark brown powder in capsule form. Doses of up to 15 grams daily of PSP have been taken long term with no observable side-effects. With there being less survival data on PSP itself, many doctors are turning to a combination of PSK and PSP (1).

### Safety

No metabolic demand on the liver or stress on the kidneys (5). Occasional darkening of the fingernails can occur (1).

## References

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