

A Study of the Anticancer Effect and Radiation Protection Effect of the Hatakeshimeji (*Lyophyllum decastes* (Fr.) Sing.) on Radiation Exposure

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This study examined the effects of hatakeshimeji (*Lyophyllum decastes*) with regard to immunoactivity against cancer, radiation protection, and increase in the lymphocyte vs. multi-form nuclear leukocyte ratio (L/P activity).

To determine the antitumor effect, each of ten 6-week-old ICR mice was inoculated with the Meth A fibrosarcoma cell (ascites) of 2×10^6 by endoceliac injection in the right and left lower abdomen. Then, to monitor tumor development on the surface of the skin, the tumor head diameter and overall diameter were measured with calipers every other day from the 3rd until the 25th day, for a total of 12 times. Hatakeshimeji in

a dose of 100 mg/kg in a saline solution was administered to the test group by endoceliac injection into the tumor. The tendency to repression of development of the lower abdomen transplant tumors of this group was recognized as the anti-tumor effect.

The radiation protection effect on a 2 Gy radiation-exposed group with hatakeshimeji medication was determined by comparison with an independent 2 Gy irradiated group ($p < 0.005$), using ICR mice. L/P activity was evaluated at $p < 0.05$ on the basis of intraperitoneal administration.