Research Article (Dette er en oppsummering, hele artikkelen er refert over).

Effect of **Agaricus blazei Murill** on the Pulmonary Tissue of Animals with Streptozotocin-Induced Diabetes

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The present study was designed to evaluate the oxidative stress as well as the therapeutic effect of *Agaricus blazei* Muril (*A. Blazei*) in rats with streptozotocin-induced diabetes. We used 25 Wistar rats, and DM was induced by injecting streptozotocin (70mg/Kg i.p.). *Agaricus blazei* Muril was administered daily starting 40 days after disease onset. *A. Blazei* was tested as an aqueous extract for its phytochemical composition, and its antioxidant activity in vitro was also evaluated. Lipoperoxidation (LPO), and superoxide dismutase (SOD), catalase, and glutathione peroxidase activities were measured in the pulmonary tissue, as well as the presence of inducible nitric oxide synthase (iNOS), through immunohistochemistry. An anatomopathologic study was also performed. Phytochemical screening of *A. Blazei* detected the presence of alkaloids and saponins. The extract exhibited a significant antioxidant activity in the DPPH-scavenging and the xanthine/oxidase assays. Pulmonary LPO increased in diabetic animals (0.43 ± 0.09; $P < .001$) as compared to the control group (0.18 ± 0.02), followed by a reduction in the *A. Blazei*-treated group (0.33 ± 0.04; $P < .05$). iNOS was found increased in the lung in diabetic rats and reduced in the *A. Blazei*-treated group. The pulmonary tissue in diabetic rats showed oxidative alterations related to the streptozotocin treatment. The *A. Blazei* treatment effectively reduced the oxidative stress and contributed to tissue recovery.