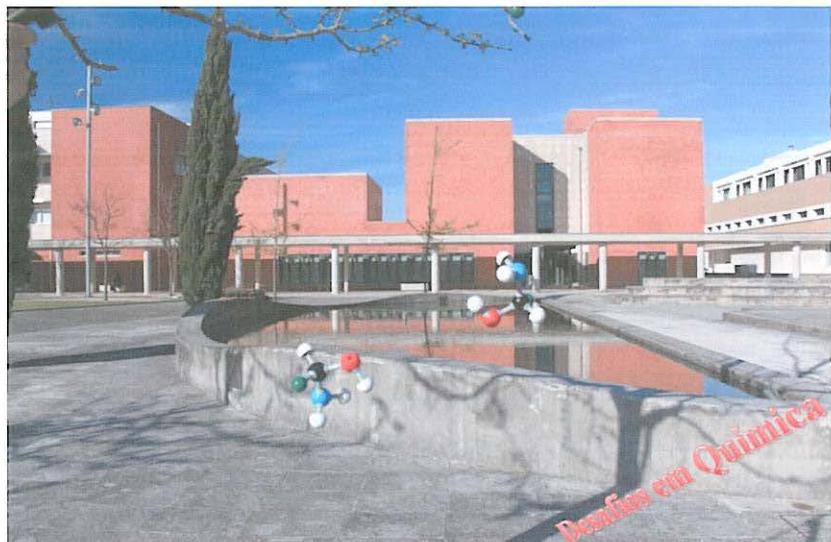


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Agaricus blazei and *Lentinus edodes* dried formulations: chemical composition and antioxidant activity

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A balanced diet is one of the mainstays of therapy for the prevention of the oxidative stress, which if cannot be eliminated, at least can be controlled. Food antioxidants may help intrinsic antioxidant mechanisms to fight against oxidative stress. Several mushroom species have been pointed out as sources of antioxidant compounds,^[1] besides their important nutritional value. *Agaricus blazei* and *Lentinus edodes* are among the most studied species all over the world,^[2,3] but those studies focused on their fruiting bodies instead of other presentations like powdered preparations used as supplements.

In the present work the chemical composition (nutrients and bioactive compounds analysed by chromatographic methods) and antioxidant activity (free radical scavenging activity, reducing power and lipid peroxidation inhibition) of dried powder formulations of *Agaricus blazei* (APF) and *Lentinus edodes* (LPF) from São Paulo, Brazil were evaluated.^[4] Powder formulations of both species revealed the presence of essential nutrients such as proteins, carbohydrates and unsaturated fatty acids. Furthermore, they present low fat content (<2 g/100 g) and can be used in low-caloric diets, just like the mushroom fruiting bodies. APF showed higher antioxidant activity and higher content of tocopherols and phenolic compounds (124 µg/100 g and 770 µg/100 g, respectively) than LPF (32 µg/100 g and 690 µg/100 g). Both formulations might be used as antioxidant sources to prevent diseases related to oxidative stress.

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