Nutritional evaluation on *Lignosus cameronensis* C. S. Tan, a medicinal *Polyporaceae*

Shin Yee Fung, Peter Chiew Hing Cheong, Nget Hong Tan, Szu Ting Ng, Chon Seng Tan

First published: 10 January 2019 | [https://doi.org/10.1002/iub.2006](https://doi.org/10.1002/iub.2006)

### Abstract

Sclerotial powder of a cultivated species of the Tiger Milk Mushroom, *Lignosus cameronensis* was analysed for its nutritional components and compared against species of the same genus, *Lignosus rhinocerus* and *Lignosus tigris*. All three species have been used by indigenous tribes in Peninsular Malaysia as medicinal mushrooms. Content of carbohydrate, fibre, mineral, amino acid, palatable index, fat, ash and moisture were determined. *L. cameronensis* sclerotial material consists of carbohydrate (79.7%), protein (12.4%) and dietary fibre (5.4%) with low fat (1.7%) and no free sugar. It has the highest content of total carbohydrate (791 g kg⁻¹), energy value (3,700 kcal kg⁻¹) and calcium (0.85 g kg⁻¹). The crude protein content (123 g kg⁻¹) is comparable to that of *L. rhinocerus* with its main amino acids consisting of glutamic acid, aspartic acid and leucine. The umami index is determined to be 0.27. The total essential amino acid (45 g kg⁻¹) is comparable to that of *L. tigris*. The main mineral is potassium (1.51 g kg⁻¹) and the Na/K ratio was <0.6. Heavy metals such as mercury, cadmium, lead and arsenic were absent. *L. cameronensis* has the highest amount of food energy, total carbohydrate and calcium compared to those of both *L. rhinocerus* and *L. tigris*. The essential amino acids comprised almost 40% of the total amino acid content, slightly more than that reported from sclerotial powder of the *L. tigris*. © 2019 IUBMB Life, 9699(9999):1–6, 2019