

# [Mushrooms well medicinal values but it is also](https://assignbuster.com/mushrooms-well-medicinal-values-but-it-is-also/)

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Mushrooms are important for their food values aswell medicinal values but it is also popular due to their delicacy and flavour(Chandra and Samsher, 2006). A. auriculacontained 18. 3g protein, 18. 9g carbohydrates and 50g dietary fiber per 100g ofdry fruit body (Khan et al.

, 2009; Kim et al., 2007 and Ma et al., 2010) and itplays crucial role in China mushroom industry due to containing of highnutritional value therefore to be processed into a variety of foods (Fan etal., 2009).

According to Usha and Suguna, (2014) A. polytricha has high carbohydrate (28. 5 %), protein (36 %) Crudefibre (22. 35%) content but low fat (3. 40%) content and it make them a muchideal food item for diabetic, cancer and cardiac patients.

This high proteinand low fat characteristics of the edible mushrooms has been previouslyreported by many researchers (Diez and Alvarez 2001; Longvah andDeosthale1998). A. auricula-judae isa poor source of protein containing about three times lower protein than Lentinus connatus and Pleurotus ostreatus (Celestine et al., 2015) in Spain, similar finding was also observed by other researchers fromdifferent countries (Kakon et al., 2012 and Gbolagade et al., 2006) in case of A. polytricha. The proximate and mineralelement compositions of five wild growing mushrooms species in Abakaliki areaof Nigeria was investigated by Celestine et al.

, (2013) They found that A. polytrichia had the least amountprotein (3. 77%) but highest amount of carbohydrate (80. 85%) where as P. ostreatus had the highest amountprotein (16.

35%) but least carbohydrate value (44. 41%) studied in Nigeria. Theyalso reported that mushrooms are also good sources of nutritionally importantmineral elements but they did not contain toxic levels of Cd and Pb. Theproximate composition, mineral element components of two selected wild ediblemushrooms like, Lentinus squarrosulusand A. politricha from three regionsfrom the center of Côte d’Ivoire was investigated (Anno et al., 2016). Anno etal.

, (2016) observed that this two mushrooms contained high level of proteins, crude fibre, carbohydrate, ash but fat content was very less and rich inpotassium, phosphorus, calcium and magnesium but Cd and Pb contents of bothspecies was generally very low. Similar finding was also reported by Okechukwuet al. (2011) where the protein content was 10. 50% and 14. 88% in A. polytrichia and P. ostreatus, respectively, in Nigeria. Hung and Nhi (2012)observed that in comparison to other studied mushrooms, A.

polytricha had proteinand lipid content was lowest but carbohydrate content was highest, in Vietnam. The difference in protein contents of in different mushrooms is due to thenumber of factors like, type of mushroom, stage of development, part of thesamples, level of nitrogen availability and the location (Longvah andDeosthale, 1998). Gbolagade et al., (2006) and Johnsy et al., (2011) reportedthat the ash content of A.

polytrichawas 5. 2% and 8. 7% respectively, on dry weight basis. According to someresearcher generally, fresh mushrooms contain a relatively high amount of fibrewhich may be responsible for its relatively high amount of ash (Cheung, 1998). A. auricula-judae contains 3. 6% of ash, 12.

5% of protein, 1. 7% of fat and a large amount of carbohydrates (66. 1%) perdry matter in India.

A. auricula-judae contains 3. 6% of ash, 12. 5% of protein, 1. 7% of fat and a large amount of carbohydrates (66. 1%) perdry matter (Irina et al., 2015) in China.

Johnsy et al., (2011) reported that A. auricular contained carbohydrates(33. 23%), lipids (1. 63%), protein (36. 3%), fibre (8. 4%) and ash (7. 07%) and itwas ranged in between other studied mushrooms.

Ezeibekwe et al., (2009) foundthat A. auricular and P. squarrosulus contained low protein, ash, fat and carbohydrate contents in compared with P. tuber-regium in Nigeria. Wild and cultivated mushroom of A. auricular, nutritionally rich incarbohydrates, protein, but lowest value fat, ash content and low levels ofmacro- and micro-elements was recorded (Obodai et al., 2014).

The proteincontent of mushrooms is known to be highly variable due to different reasons like, strain of species, tissue type and stage of development, substrate and methodof analysis (Usha and Suguna, 2014). From the above findings it was found that Auricularia spp. didn’t very much differfrom other edible mushrooms in its nutritional composition. Therefore thisrelative high carbohydrate content as well as food energy values in Auricularia spp.

suggests that they areexcellent source food items (Chukwu, 2000) and these mushrooms are used as araw material to produce low-calorie dietary food items(Irina et al., 2015), aswell as a good source of biologically active beneficial components. Most of the AuriculariaSp. contain high amount of carbohydrate but low amount of fat. In some speciesthe protein contains may be high up to 36%. This mushroom reach in potassium, phosphorus, calcium and magnesium, but cadmium and lead contain generally verylow. Due to presence excellent nutrient contains Auricularia may be choice dietary item for diabetic, cardiac, andcancer patient. There are many species of Auriculariaavailable in wild condition but it is necessary to identify this species atmolecular level.

The documentation and characterization of various species of Auracularia is very much important, because it is the fourth most important cultivated mushrooms in all over theworld after Agaricus, Lentinus and Pleurotus.