



## Determination of Element Contents of *Ganoderma Applanatum*

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**ABSTRACT:** Mushrooms are highly appreciated for their nutritional and medicinal properties. Mushrooms have a great nutritional value since they are rich in carbohydrates, proteins, fibers, minerals, vitamins and low in fat content. Mushrooms are a good source of minerals and trace elements which perform specific and vital functions for normal growth and maintaining good health. *Ganoderma* is highly valued as a folk medicine and functional food due to its effectiveness in treating broad range of diseases and promoting health benefits. The aim of this study was to determine the element contents in *Ganoderma applanatum* collected from Uttarakhand, India by Wavelength Dispersive X-ray Fluorescence (WDXRF) Spectrometry. The calcium content was found to be higher than those of the other elements in the studied mushroom. The concentration of zirconium in *G. applanatum* was determined to be present in least amount. According to Recommended Dietary Allowances (RDA) and nutrient density, *G. applanatum* is a good source of calcium, phosphorus, magnesium, iron and zinc. From the comparison of the results with the defined permissible concentration limits, it has been concluded that there is no toxicological health hazard in the consumption of these mushrooms as the levels for heavy metals obtained are below the permissible limits. The results of present study provides detailed information on the elemental composition of *G. applanatum* making the use of *Ganoderma* powder in various food and pharmaceutical applications as it is an excellent source of mineral elements that are required for good health. © 2014 iGlobal Research and Publishing Foundation. All rights reserved.

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