

HONORARY PRESENTATION

The Need for Scientific Validation of Medicinal Mushroom Products

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MUSHROOMS IN TRADITIONAL CHINESE medicine represent a summation of more than 3000 years of use for the prevention and treatment of diseases. Interest in medicinal mushrooms and their products is now spreading worldwide. They have received wider circulation and broader application. Nevertheless, it is my concern to have them scientifically validated so as to upgrade empirical conclusions based on trial and error of the last 3000 years.

The specific actions and all possible side effects, if any, of each species should be systematically determined and clearly defined. One purpose is to make sure that only the effective mushroom products would reach a person/patient to ensure the best benefits. Another goal is to identify the key/major active components of each species, especially those with novel structures, so as to standardize selected ingredients.

Any program to evaluate the merit of mushroom products would have to involve a multidisciplinary team of scientists and medicinal professionals. At the present time, many of the medicinal properties attributed to mushroom products are based on data obtained from *in vitro* and animal-based experiments. Much more advanced science is required to

demonstrate that claims of enhanced function and reduced disease risks are also applicable in the human context.

Furthermore, a major problem associated with mushroom-based dietary supplements/nutriceuticals is their wide variability and the current lack of standards for production and testing protocols necessary to guarantee product quality. The active ingredient components of the majority of present commercial products have not been indicated.

Improvements in both areas are essential in order to increase and maintain consumer confidence, protect public health, and meet current and future quality demands and safety criteria set by regulatory authorities. This is especially important given that progress achieved during the past two decades in both research and production is clearly documentary evidence of the benefits medicinal mushrooms have to offer the human healthcare system.

Modern medicines may not always provide the remedies required, and mushroom products (nutriceuticals) are likely to prove extremely useful in both alleviating and preventing human disease conditions. The scientific validation of mushroom products can help boost the credibility of mushroom products.

