Nutritional prominence of processed Mucuna beans tragedy for Parkinson’s disease management

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Abstract

Good nutrition is an important part involved in the leading healthy lifestyle. Cooking of food using different processes is ancient techniques which were used by people in day today life. Among all the technique only few are used by people to maximize the nutritional potential and reduce anti-nutritional potential. Plants based nutrition is superfluous source of rich source of polyphenols, flavonoids, carotenoids, antioxidants (ROS and RNS), terpenoids, iso-flavonoids and other phytochemicals. various studies on processings reports that Hydro-Thermal processing of Mucuna seed highly reduce the phenolic and L-DOPA content. it is also conducted that effect of different cooking processes on nutritional, anti-nutritional content, proximate composition with vitro antioxidant and anti-inflammatory potential of Mucuna bean powder which were used as source of L-DOPA to cure the Parkinson’s disease. The work was conducted to determine the influence of different nutritional parameter of the Mucuna beans species importance in management of Parkinson’s disease (Shaking Palsy). The quantitative assessment of bioactive molecules like phenols, flavonoids, tannins, proteins, carbohydrates, antioxidants and anti-inflammatory potential were carried out with respective spectrophotometric analysis. RP-HPLC(Reverse phase-High pressure liquid chromatography) technique is used to quantify the L-dopa and total phenolics present. Findings revealed that germination process, Gradual increase in the content of protein and decrease the starch content were observed (maximum nutritional potential). Tannin and phytic acids (anti-nutritional content) were reduced in hydrothermal processing and direct heating of seeds. It also concluded that use of these techniques helps to make pure source of L-DOPA used in the prevention of disease.

Speaker Biography:

Mr. Suryawanshi Suresh Shivaji has completed his Post Graduation from Shivaji University Kolhapur and Currently Pursuing PhD Degree from Department of Biochemistry, Shivaji University Kolhapur on topic “Biochemical and Physiological properties of Mucuna Imbricata : special prominence in Parkinsons disease treatment. He has published more than 6 research papers in in reputed international journals and 2 Bookchapters along with that he is also attended 15 international/national conferences till date. He is also selected for 23rd World Conference on Food and Nutrition Science, Tokyo, Japan during November 11-12, 2019. Currently he is working on processing effect of various species of Mucuna Beans special effect on nutertional and anti-nertional factors.

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