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Bambara groundnut (*Vigna subterranea (L.) verdc*) nutraceutical: An unexplored resource for functional and health foods

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The use of nutraceutical for various health benefits has increased significantly globally due to risk of toxicity and adverse effects of some synthetic drugs. Nutraceutical is a food or a part of food that provides medical benefits apart from nutrients that includes prevention and or treatment of a disease. It is therefore not unexpected that they have wide range of application. Bambara groundnut is an under-utilized legume with rich nutritional profile and widely used in African traditional medicine but have not been exploited for their vast nutraceutical potential. When compared to other beans, it has highest concentration of dietary/soluble fiber, rich in polyphenols (anthocyanin, catechin, quercetin and their derivatives, quinic acid, medioresinol, *p*-coumaric acid, salicylic acid, caffeic acid derivative), polyunsaturated fatty acids, antioxidant vitamins/minerals and protein. However, with increasing interest in plantbased nutraceuticals for various health applications due to their biological and pharmacological activities, it becomes clear that this African indigenous legume also represent a potential source of nutraceutical to be exploited for health benefits. It is surprising that there is limited published information on its nutraceutical potential and medicinal benefits. The objective of this paper is to provide information regarding new and value added uses for Bambara groundnut relative to as potential nutraceutical source for various end uses and to provide a sense of how important this potential value added traits could be on exploitation and application in functional food development. Lastly, we focused on the remaining research work to be done in order for Bambara groundnut to find wider application in functional food, pharmaceutical industry/medicine.

Biography

Jane N Okafor has completed her PhD at University of Nigeria, Nsukka. She is a Deputy Director at Nutrition and Toxicology Division, Federal Institute of Industrial Research, Oshodi (FIIRO). She has published more than 24 papers in reputed journals. Currently, she is a Post-doctoral Research Fellow at Cape Peninsula University of Technology, South Africa.

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