Moringa oleifera: A rich source of high-value nutrients and bio-actives for functional foods and nutraceuticals industry

*Moringa oleifera* (M.oleifera), a well-known plant from the Moringaceae family, is very much popular among the rural communities due to its impressive range of nutritious and traditional medicinal benefits. Currently, there has been an increasing interest in exploring the functional food and nutraceutical potential of this multipurpose species due to its wide array of high-value nutrients and medicinally important bioactives such as essential amino acids and minerals, vitamins, high-oleic lipids, bio-peptides and polyphenolics along with a rare and rich combination of β–sitosterol, zeatin and antihypertensive compounds (thiocarbamate and isothiocyanate glycosides). A number of therapeutic and biological activities such as antipyretic, antiulcer, antioxidant, antimicrobial, anti-inflammatory, anti-diabetic and diuretic have been attributed to different parts of this miracle tree. In view of the widespread nutritional, folk medicinal and therapeutic uses of *M. oleifera*, the present lecture is mainly designed to focus and highlight the growing potential of *Moringa* as a rich source of nutritional substances and valuable phytochemicals for the development of functional foods and nutraceuticals. An overview of various *Moringa* derived functional food and cosmo-nutraceutical products, available on shelves, as well as the current market trends and future prospects of *Moringa* industry are also discussed.

**Biography**

Farooq Anwar obtained his PhD in Analytical Chemistry and has more than 15 years of research and teaching experience at different organizations including employments as Quality Control Executive, Scientific Officer and Post-doctoral Researcher at Canada and Malaysia. He is mainly involved in bio-analytical and phytochemicals research. He is parentally working as Associate Professor at University of Sargodha, Pakistan and is currently serving at the Department of Pharmaceutical Chemistry, Prince Sattam bin Abdulaziz University, Al-Kharj, Saudi Arabia. He has the Honor of being selected as Fellow of the Chemical Society of Pakistan and Productive Scientist of Pakistan. On the basis of scientific achievements, The Academy of Sciences for the Developing World (TWAS) based in Trieste, Italy has granted him Young Affiliate Fellowship-2009. He has also been awarded Dr. Atta-Ur-Rehman Gold Medal/Prize-2010 (Chemistry) by Pakistan Academy of Sciences (PAS). He has supervised 10 PhD and 50 MPhil research students. Overall, he has published 200 research articles bearing cumulative Impact Factor of 300 and Citation over 5000 to his credit.

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