Overview of Total Quality Management in Food Enrichment: A Bioactive and Nutraceutical Approach.

DR. Jyoti D. Vora, M.Sc, Ph.D, F..S.Sc. LMZSI, MASFFBC, CME (USA), NET CLEARED,

Certified Functional Foods Scientist, (Ffc, USA),

ABSTRACT

This research endeavour aims at focussing on Total Quality Management techniques to address a significantly fulcrum-oriented aspect of Food processing, namely Food ENRICHMENT. This ethos has been chosen as the focal point of the research as it is extremely relevant in the backdrop of the Global Pandemic. The need of the hour is to make available a spectrum of locally grown, accessible and native dietary inclusions from the Indian diet, to attain, retain and maintain Holistic Wellness in the populace. The perspective and mind-set is Universally relevant due to many factors. They are designed to benefit paediatric to geriatric subjects. They are biochemically nodal in generating a quantum enhancement in immune profile of the subject and furthermore, the research can be extrapolated to commercial,large-scale and entrepreneurial dimensions. The added advantage is a substantial capacity building in Trained and skilled Workforce equipped in making available Novel Nutritional Products for consumption which are backed with emphatic Organoleptic acceptance. The postscript, of course, is the ensuing commercial viability and sustainable Wellness at the societal level. The underlying research methodology is governed by certain commonalities. A well-known nutritional component is taken as a subject of study and empirical analysis is undertaken to estimate the proximate principles which would include a large variety of secondary metabolites with proven nutraceutical benefits to health and Wellness. Such a dietary standpoint has antioxidant, antihelminthic, antimicrobial activities and anticarcinogenic properties which emphatically enhance the cardiovascular profile, negate hypersensitivity, improve digestion, boost overall immunity and help to maintain an optimised Biochemical profile of all subjects throughout life. Significantly, most of such Wonder plant products are edible and have generated research interest and focus for time immemorial. Our work encompasses various areas of the biochemical and Nutraceutical profile, but the present study was undertaken with the aim of developing a nutritionally enriched product by incorporation of bioactives and nutraceuticals with the view of ENRICHMENT of the product obtained from it. The scientific ethos of this research endeavour was as follows: identification of a locally available and traditionally used functional food as the subject of interest. Assessment of the chosen food was done from the proximate content point of view and its various health benefits were evaluated. An overall analysis of the awareness quotient was carried out as far as this spectrum of health benefits is concerned, through a precise and focussed questionnaire. A viewpoint was also obtained about the requirement of newer products and variants using the functional food of interest. Based on this insight and innovative inputs, a Novel Product was developed which had emphatic Nutraceutical properties. This Novel product was whetted on the benchmarking of several criteria of Food Processing and Food Production. A concerted effort was made towards the establishment of total Quality Management. This research finds the ENRICHMENT of FOX MILLET FLOUR as a representative example.

Biography

Dr. Jyoti D. Vora, an eminent Biochemist is the Head of the Department of Biochemistry and Food Science and Quality Control, Ramnarain Ruia College, India. ... Vora has graduated with Honors in Microbiology and Chemistry from University of Mumbai in 1977, followed by Post graduation in Biochemistry by research in 1980.

Jyoti00@gmail.com