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Organoleptic evaluation of some home based recipes incorporating nutraceuticals single and multiple blends

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ABSTRACT

The study has been undertaken to evaluate organoleptic characteristics of the food products prepared by incorporating nutraceuticals singly and in blended forms. Three variants were prepared with incorporation of nutraceuticals at 7%, 14%, 21% along with a bland nutraceuticals free variant to serve as control. The four variants were prepared and served fresh to 15 semi-trained personals for the evaluation of organoleptic characteristics like colour, flavour, taste, texture and over all acceptability. Results revealed that the first two variants were accepted as well as control in terms of all the sensory attributes but not the third variant. Thus it can be concluded that the two nutraceuticals can be successfully incorporated up to 14% level.

Key words : Nutraceuticals, Tomatoes, Rice bran oil, Sensory evaluation

INTRODUCTION

Belief in healing powers of foods is not a new concept and has been a widely held view for generations and dating back to the time of Greek physician Hippocrates (460-377BC). There was little distinction between food and drugs till the dawn of the era of modern medicine. The practice of medicine itself consisted largely of the wise choice of natural food products. Hippocrates clearly recognized the essential relationship between food and health and emphasized that “.....differences of diseases depend on nutriment” (Andlauer and Furst, 2002).

The search for specific constituents of plant, animals, minerals and those of microbial origin which are beneficial to our mental and physical health has made us coin the term ‘*nutraceuticals*’. The term coined by *Stephen de Felice* (De Felice, 1992) combining nutrients and pharmaceuticals referred initially to food extracts that can be used as preventive drugs or dietary supplements (Prakash *et al.*, 2004). They have been popularized by the foundation for the innovation in medicine by defining them as *any substances that may be considered as food or part of a food and provide medical or health*

benefits, including the prevention and treatment of disease (De Felice, 1992). Thus, they are the hybrids of both nutrients and medicinal principles and fall into the grey area between foods and medicines. They are found in a number of products emerging from the food industry, the herbal and dietary supplement market and the pharmaceutical industry. They range from isolated nutrients, dietary supplements; genetically engineered “designer” foods, herbal products and processed products such as cereals and soups. They can be grouped in different ways, depending on the food sources, mode of action and chemical structures (Lee *et al.*, 2004).

Lycopene, a member of the carotenoid family is a lipid soluble antioxidant that is synthesized by many plants and microorganisms but not by humans. It is a highly unsaturated, 40 carbon acyclic molecule containing 11 conjugated and 2 unconjugated double bonds arranged in all trans configuration. It is present in many fruits and vegetables. However, tomatoes and processed tomato products (juice, sauce, soup, pizza and spaghetti sauce) constitute the major sources and account for more than 85% of all the dietary sources of lycopene. The other