Formulation and Standardization of Functional Foods
Incorporated Chikkies to Improve the CD4 Cells
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Abstract: A food either natural or formulated will enhance physiological performance or prevent or treat disease or disorder. Functional foods have been defined as foods with ingredients (Either, naturally occurring or added) that provide health benefits beyond the traditional nutritive value of food. The herbs identified are largely useful for the treatment of immune disorders or compromised immune system. Herbs or ayurvedic preparation with immune stimulant property have traditionally been use to treat various disease like AIDS and transplant rejection. AIDS is not a disease, a collection of more condition result from the damage to the immune system and other parts of the body infection by HIV virus. Some Herbs like Trichopus zeylanicus (Arokya Patchai), Tribulus Terrestris (Nerujimull), Tinospora cordifolia (Shindlla Kodi), Terminalia catappa (Nattu Vatham Kottai), Achyranthes Aspera (Nayuruvi), Arabinoxylon (Rice bran), Trichosanthes Cucumerina (Snakegourd) improve the immune system, prevent the replication of the HIV Virus, have antioxidant activity, increase the CD4 cells. And they increase the life time of the HIV patients. The Chikkies were prepared by functional foods incorporated in three different proportions viz, 10 percent, 15 percent, 20 percent respectively. The developed product were evaluated by using the panel judges and 5 point hedonic scale. 20 percent concentration were selected for the study. Nutrient content of the functional foods incorporated Chikkies was analyzed and the product was packed in three different kinds of packaging like 100 gauge and 200 gauge polythene bags and vacuum packaging. The keeping quality of the functional foods incorporated Chikkies was noted. The following are the result of the nutrient analysis: Energy (378kcal), protein (10.32g), carbohydrate (64g), fat (17.7g), fibre (22.6g), iron (18mg), calcium (780mg), phosphorous (240mg), copper (1.08mg), zinc (5.26mg).

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vitamin C (8.2mg), total antioxidant (55%) and phenolics (43%). The result of the microbial study showed that speck of microbes were found in the product in vacuum package and 100 and 200gauge polythene bags package at the 45th day. There was a maximum difference in the nutrient content of functional foods incorporated Chikkies when compared to control. These showed the functional foods incorporated Chikkies are rich in nutrients that are helpful for improving the immune system. This is the natural, alternative and inexpensive herbal formulation for the HIV patient.

Keywords: Functional foods, Chikkies, immune, CD4 Count, Formulation, Standardization