



Application of Microencapsulated Fish oil in Instant soup mix as a source of omega-3 fatty acids

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Abstract : This research study was conducted to develop an optimized formulation of instant soup mix which is enriched with omega-3 fatty acids. Sardine fish oil was used for microencapsulation by spray drying. Sardine fish oil is rich source of omega -3 fatty acids. The effect of wall material concentration and fish oil concentration on microencapsulation was studied. A Rancimat method was used to determine oxidative stability of the obtained microcapsules and Particle size analysis of the spray dried powder was done using Malvern Zetasizer Nano ZS. Various batches were conducted for optimization of instant soup mix. Sensory evaluation of soup mix was done and measured overall acceptability. Oxidative stability and chemical characterization of optimized soup mix were done. This research study ensures healthy omega-3 fatty acids reach soup mix with good acceptability.

Keywords : Omega-3 fatty acids, Soup mixture and Rancimat.

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