

23<sup>rd</sup> day birds were starved for one hour and then fed for two hours to ensure sufficient gut fill for digesta sample collection. Birds were then killed, following dissection of the lower small intestine, digesta sample was gently flushed with distilled water and collected into a collection vessel. The digesta sample was then analyzed for ileal digestibility assay in order to compare the amino acid digestibility of both diet. Soybean sample and fish silage sample were also subjected to amino acid analysis. Coefficient of apparent amino acid digestibility was calculated which clearly showed the highest digestibility of amino acid had occurred for fish silage diet and lowest for soybean diet. The presence of anti-nutritional factors in soybean meal such as trypsin inhibitors is responsible for lower digestibility.

#### AV PO 01

### Quality assessment of microencapsulated DHA fortified nutritional supplement

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**M**icroencapsulated  $\omega_3$  poly unsaturated fatty acids have immense potential for food applications. A nutritional supplement based on low cost ingredients including wheat flour, soy flour, gram flour, ground nut and cashew nut was prepared. Encapsulated Docosa Hexaenoic Acid (DHA) powder containing 7% DHA was added to the nutritional mix at 2% level and vacuum packed. This product is intended for the use of infants above 6 months. Fatty acid profiling of the nutritional mix indicated

2.87% linoleic acid, 0.82% EPA and 2.05% DHA in the sample. Amino acid profiling indicated the presence of aspartate, glutamate, leucine, arginine and proline in major proportions. Sensory quality and oxidative stability of the product with and without the presence of 1% ascorbic acid (AA) was evaluated over a period of 12 months storage at ambient temperature. Both the samples were in acceptable condition over the entire storage period. Slight fishy odor was noticed in the ascorbic acid incorporated samples at the end of 12 months storage. Lipid oxidation as assessed by Thio barbituric acid reactive substances did not exceed the acceptable limit of 2 in both the sample during the entire 1 year storage period. Similarly, Aerobic Plate Count also remained in the lower levels where control and AA added samples had 3.65 and 3.44 log 10 cfu/g, respectively at the end of 1 year. The results indicate that the nutritional supplement containing encapsulated DHA retained its quality under vacuum packed conditions for 1 year, and it can be used a supplement to infants.

#### AV PO 02

### Suitability of *Pangasius hypophthalmus* as a raw material for fermented fish product, ngari

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**F**ermented fish products are highly preferred foods in North-eastern region of India, northern Europe and the south east Asian countries. *Shidal*, *ngari*, *hentak*,