BIOENRICHMENT

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NUTRIENTS HAVE BEEN ADDED TO MAKE THE FOOD MORE NUTRITIOUS

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Bio-enrichments play an important role in delivering nutrients to marine fish larvae.

There are many enrichment products with different levels and ratios of EFA, anti-bacterial agents and vitamins are commercially available.

Species-specific enrichments are, however, lacking.

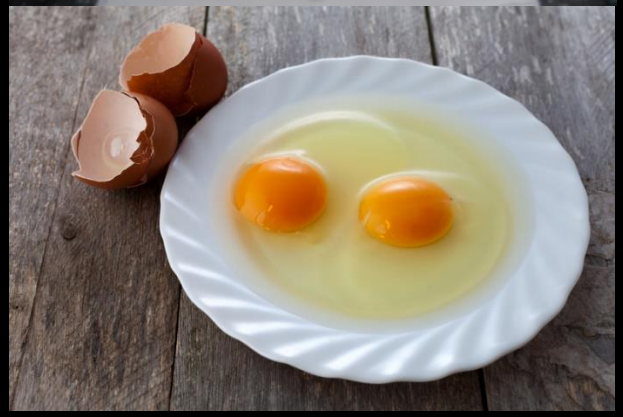
Sometimes, especially with new species, it is desirable to have a product with a targeted nutritional profile.

Several enrichment techniques have been developed, including microalgae, oil-based emulsions and microencapsulated preparations.

But these techniques and commercial emulsifiers are increasing the cost of production.

METHOD OF BIOENRICHMENT

- The cod liver oil will be purchased from market.
- The 50 ml of cod liver oil will be taken into glass beaker and heated on hot plate to 50º C.
- The heated cod liver oil will be poured into egg yolk and 50 ml of hot (50º C) tap water will added and mixed well.
- While mixing, 2.5 ml of soya lecithin will be added and mixing was continued until fluid turns into a creamy white solution.
- Then prepared emulsion will poured in to 250 ml bottle and covered. The bottle will be labeled with date and stored in refrigerated till use.



BIOENRICHMENT OF *ARTEMIA*

- The emulsion will be used at a concentration of 0.5 ml per liter of sea water.
- The emulsion will be aerated vigorously for 10 minutes to ensure good mixing before adding to *Artemia*.
- The 300-400 numbers of *Artemia* naupulii will be stocked in 1 liter of filtered sea water.
- The continuous aeration will be given.
- The experiment will be lasted for different hours like 6, 12, 18, 24, 30, 36, 42 and 48 hours.
- Finally enriched *Artemia* naupulii will be harvested and analyzed for fatty acids.