

3. Raw material suitable for fish meal production

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Raw material

Raw material used for production of fish meal varies from region to region depending on the availability.

- In general, three types of raw materials are used in fish meal manufacture which includes oily pelagic fish (oil sardine), low values whole fish containing more bones, inedible parts of fish and shellfish.
- Region specific raw materials are anchovy in Peru, Menhaden in USA, Pilchards in South Africa, Herring and Capelin in Norway, and oil sardine in India.
- Oil sardine is most commonly used for fish meal and fish oil production in India due to its availability. Freshness of raw material is important in order to get quality fish meal. Raw material with higher TVB-N content is unacceptable in fish meal production. Filleting and cutting waste is also used in India as raw material for fish meal production. Seafood processing waste contains lesser amount of proteins and higher minerals. Hence, grade I fish meal production is not possible from waste.

Raw material handling and preservation

- Due to the highly perishable nature of raw material, quick manufacture of fish meal after receiving of raw material will produce

quality fish meal. If care is not taken while handling and storage, poor quality fish meal is obtained at the end.

- Chemical preservatives used for preservation of fish used for production of fish meal include formaldehyde and sodium nitrite. Initial freshness of fish and preservative concentration are the factors involved in the use along with storage temperature. Its excess use results in toxicity and processing problems. Icing is the most commonly used method for storing fish before manufacture of fish meal.
- Higher storage temperature for fish results in lower quality fish meal.