



Introduction to Quality Management and Applications



Concept of Quality Management:

- The term quality broadly refers to degree of excellence of any product.
- The processing industries can ensure quality product to the consumer by outlining and adopting strict quality control measures during handling and processing of the product.
- This becomes necessary not only to protect consumer interests but also to develop brand name to the product.

- The industries involved in processing fish and fishery products have to follow several concepts involved in quality management system so as to produce a quality product.
- Quality is defined as those characters in a product which have significance in consumer acceptability.
- The quality of a product is influenced and controlled by several factors.
- The quality in fishery products is the result of physical, chemical, biochemical, organoleptic and bacteriological characteristics of the product.

- Thus, the quality depends on factors such as intrinsic composition, nutritive value, degree of spoilage, damage, deterioration during processing, storage and distribution, hazards to health, consumer satisfaction, aesthetic consideration, product yield and profitability to producer and seller.
- In general, the quality of fish means all that attributes which consciously or unconsciously the consumer/ buyer considers should be present.
- However, the decision on quality ultimately rests with fish consumer.

Quality types:

- Based on the origin of the factors controlling the quality, the quality of a product can be grouped in to intrinsic quality and extrinsic quality.
- **Intrinsic quality:**
- Intrinsic quality refers to sum of attributes that are inherent in raw material.
- It is affected by factors such as fish species, size, sex, condition, composition, parasites and other organisms, naturally occurring toxins, contamination with pollutants etc.
- Factors affecting intrinsic quality cannot be controlled.

- **Extrinsic quality**
- Refers to sum of effects of all the treatments that the fish receives after catch till it reaches consumer.
- It is affected by degree of freshness, conformity with declared mode of presentation/ product style, weight, size, ingredients, food additives, acceptability of processing methods, suitability of containers and packaging methods, extent of cleanliness and sanitary conditions followed during handling and processing.
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- The factors controlling extrinsic quality can be controlled.

Standards for fish and fishery products

- The standards for fish and fishery products are formulated with a aim to attain a minimum standard of cleanliness and hygiene in handling, processing and marketing of fish.
- These standards are also intended to guide and promote export or import of fishery products between countries.

Types of standards for fish and fishery products

- Standards for fish and fishery products are grouped into 2 types;

1. Safety standards

- Safety standards are those standards that help to protect the consumers' health against the damaging effect of food.
- Adherence to these standards involves adopting reasonable standards of hygiene, control on use of additives and prevention of contaminants thereby ensuring the fish and fishery products free from pathogens.

2. Composition standards

- Composition standards help in protecting the consumer against any fraud by ensuring unadulterated, pure and of good quality fish and fishery products.
- Packages should contain the correct description, labeling, weights, etc .
- Several national and international standards and codes of practices that have been established for a variety of food products are successful in ensuring availability of a good quality and safe products in the market.
- The quality standards established for fish and fishery products can be broadly categorized in to national standards and international standards.

National standards

- Many fish producing countries have established their own standards and codes of practice for fishery products.
- These national standards govern the quality and standards of fish and fishery products meant for local consumption as well as for export and import.
- Some of the national standards are; Bureau of Indian Standards (BIS), British Standards (BS), United States Food and Drug Administration (USFDA), etc