SUMMARY

Chilling is a process of cooling fish while the fish remains above its freezing temperature. Low temperatures retard microbial growth, enzymatic and chemical reactions, which are responsible for spoilage. Freezing is a process of removing heat so that the water in fish is converted in to ice. Air - blast freezer and contact plate freezers are commercially used for freezing fish. In cryogenic freezing, the liquid nitrogen, carbon dioxide or freon (chlorofluorocarbon compounds) are used as freezants by directly spraying on to the fish to be frozen. Temperature range of - 18 to - 23 °C has been recognized as ideal for storage of fish and products. The quality of chilled and frozen fish resembles closely to that of fresh fish, if they are properly chilled or frozen. In many cases, the consumer will be unable to distinguish between fresh fish and chilled / frozen fish. The initial quality of fish, hygiene and sanitation, freezing and storage conditions are critical for maintenance of fish quality. Modified atmosphere packaging of fish with appropriate laminate and composition of CO_2, N_2 and O_2 helps extend keeping quality and marketing of fish and fish products.