Fish are the richest sources of animal proteins and oils containing polyunsaturated fatty acids. Fish and fish oils are rich sources of omega-3 fatty acids, have sparked intense interest in both epidemiological and metabolic ward studies (Nettleton, 1995). The three n-3 polyunsaturated fatty acids (n-3 PUFAs) are "alphalinolenic acid (ALA), eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA)".

These are available in plenty in marine fish and fisheries resources (Stone, 1998) and play a pivotal role in human nutrition in reducing cholesterol and heart problems. But, knowledge on the availability of these polyunsaturated fatty acids in fish from freshwater and brackish water habitats are highly scanty. Further, the freshwater fishes, the major carps, murrels, catfishes etc., are extensively used as favourite and cheaper food for table purposes in areas which are away from sea and marine resources in our country. Researchers have found out that Greenland Eskimos had a much lower incidence (less than 1%) coronary heart diseases compared to other modern cultures (Kendall, 1998) and the root cause for this is that the food of these Eskimos consists largely marine fish which is extremely rich in PUFAs. Possible mechanisms of this effect include the ability of long chain n-3 polyunsaturated fatty acids, which are abundant in fish, to decrease plasma levels of very low density lipoprotein cholesterol, increase vasodilation and reduce platelet aggregation (Leaf and Weber, 1988 and Schimdt and Dyerberg, 1994).

An inverse association between fish intake and the risk of death from coronary disease has also been found in prospective studies in Netherlands (Kromhout et al., 1985), Sweden (Norell et al., 1986) and the United States (Shekelle et al., 1985 and Dolecek, 1992), but not in similar investigations in Norway (Vollset et al., 1985), among Japanese men in Hawaii (Curb and Reed, 1985) or among U.S. Physicians (Morris et al.,
Evidence concerning the incidence of coronary heart disease is sparse because most studies have examined only deaths.

Therefore, an attempt is made in this investigation to fill up the gap between marine, freshwater and brackish water fish in relation to the level of concentration of PUFAs and serum cholesterol.