

Total lipid and cholesterol content in the flesh of the five important commercial fishes from waters around Jaffna peninsula, Sri Lanka

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Abstract

The present investigation was carried out to understand the total lipid and cholesterol content of flesh of five commercially important adult fishes such as *Siganus lineatus*, *Gerres oblongus*, *Scoliodon laticaudus*, *Scomberoides lysan* and *Hemirhamphus marginatus* collected from waters around Jaffna peninsula. People living in Jaffna peninsula consume fish as the main source of nutrition in their diet. However they have no definite knowledge, pertaining to which species can be intake with their food without harming their health condition. Therefore studies on the nutritional value of marine food fish is a prime theme of research for fish consuming people. In the northern province of Sri Lanka, no study on lipid and cholesterol content of fish has been done so far and therefore the present investigation was initiated. Total lipid in the flesh of five different fishes was extracted and the cholesterol content was estimated in the present study. Mean total lipid and cholesterol content of five commercially important fishes ranged from 2.63 to 4.41% and 54.2 to 104.5 mg/100 g, respectively. Values obtained for total lipid and cholesterol content of five different fishes were found to be good indication of nutritional values. Highest total lipid content was found in muscle tissue of *Gerres oblongus* lowest was in *Hemirhamphus marginatus*. However, highest cholesterol content was recorded for *Scoliodon laticaudus* and the lowest for *Scomberoides lysan*. Analysis of Variance (ANOVA) for total lipid and cholesterol content of five different adult fishes showed that there is significant difference ($p < 0.05$) between fishes.

Author keywords

Cholesterol; *Gerres oblongus*; *Hemirhamphus marginatus*; Lipid; *Scoliodon laticaudus*; *Scomberoides lysan*; *Siganus lineatus*

Indexed keywords

Species Index: *Gerres oblongus*; *Hemiramphus*; *Pisces*; *Scoliodon laticaudus*; *Scomberoides lysan*; *Siganus lineatus*