



Turkish Journal of Chemistry

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A Study on the Fatty Acid Composition of Fish Liver Oil from Two Marine Fish, *Eusphyra blochii* and *Carcharhinus bleekeri*

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Abstract: Two species of shark found in the coastal waters Karachi (Pakistan) were studied, *Eusphyra blochii* (winghead snark) and *Carcharhinus bleekeri* (sandbar shark) for their liver oil fatty acid composition. Since liver has high lipid content and traditionally the liver oil of these species been used to relieve muscular pain and arthritis in Pakistan this study was conducted. The isolation, identification and characterization of these fatty acids were carried out by gas liquid chromatography (GLC) and a combination of the thin layer chromatography (TLC)-GLC technique. A large variation was observed between winghead shark liver oil and sandbar shark liver oil. Twenty-five individual fatty acids from the oil of marine fish were analysed. Among those studied, palmitic acid was a major saturated fatty acid while stearic acid was the other major constituent. Unsaturated monoenoic fatty acids e.g. oleic and palmitoleic acids, were major constituents and traces of dienoic and trienoic fatty acids were also found. In addition, medicinally important polyunsaturated fatty acids, such as eicosapentaenoic and docosahexaenoic acids, were also identified.

Key Words: Marine fish liver oil, *Eusphyra blochii*, *Carcharhinus bleekeri*, Fatty acid composition, TLC-GLC

Turk. J. Chem., **27**, (2003), 251-258.

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