

Document details

[< Back to results](#) | 1 of 1[Export](#) [Download](#) [Print](#) [E-mail](#) [Save to PDF](#) [Add to List](#) [More... >](#)International Food Research Journal
Volume 24, 2017, Pages 544-551**Metal toxicity and environmental effects on health : A study report on mineral and heavy metal contents of different Malaysian fish species** (Article)Octavianti, F.^a, Jaswir, I.^{b,c,d} [✉](#) [👤](#)^aDental Faculty, Universiti Sains Islam Malaysia, Pandan Indah, Kuala Lumpur, Malaysia^bDepartment of Biotechnology Engineering, Faculty of Engineering, International Islamic University Malaysia, Jalan Gombak, Kuala Lumpur, 53100, Malaysia^cInternational Institute for Halal Research and Training (INHART), International Islamic University Malaysia, Jalan Gombak, Kuala Lumpur, 53100, Malaysia[View additional affiliations](#) [v](#)

Abstract

[v View references \(32\)](#)

This paper discusses effects of metal toxicity and environment on health and followed by a study report on mineral and heavy metal contents of fish conducted in Malaysia as an example. Fish, a part of being a good source of digestible protein vitamins, minerals and polyunsaturated fatty acids (PUFAs), are also an important source of heavy metals. Some of the metals found in the fish might be essential as they play important role in biological system of the fish as well as in human being, some of them may also be toxic as might cause a serious damage in human health even in trace amount at a certain limit. A comprehensive study was conducted to fishes collected in Langkawi Island, a popular tourist destination in Malaysia and the overall findings revealed that from the human health point of view, the fish is a type of fish found in the coastal areas of the island are safe for the consumption. The mineral and heavy metal contents are within the allowable limit of consumption. © All Rights Reserved.

SciVal Topic Prominence [📄](#)

Topic: Metals, Heavy | Fishes | human consumption

Prominence percentile: 97.180 [📄](#)

Author keywords

[Fin fish](#) [Heavy metals](#) [Malaysia](#) [Mineral](#) [Toxicity](#)

ISSN: 19854668

Source Type: Journal

Original language: English

Document Type: Article

Publisher: Universiti Putra Malaysia

References (32)

[View in search results format >](#) All [Export](#) [Print](#) [E-mail](#) [Save to PDF](#) [Create bibliography](#)Metrics [📄](#)

0 Citations in Scopus

0 Field-Weighted
Citation ImpactPlumX Metrics [v](#)Usage, Captures, Mentions,
Social Media and Citations
beyond Scopus.

Cited by 0 documents

Inform me when this document
is cited in Scopus:[Set citation alert >](#)[Set citation feed >](#)

Related documents

Mineral and heavy metal
contents of marine fin fish in
Langkawi island, MalaysiaIrwandi, J. , Farida, O.
(2009) *International Food
Research Journal*Heavy metals in mullet, Liza abu,
and catfish, *Silurus triostegus*,
from the Atatürk Dam Lake
(Euphrates), TurkeyKaradede, H. , Oymak, S.A. ,
Ünlü, E.
(2004) *Environment International*Determination of heavy metals in
Acanthopagrus latus (Yellowfin
seabream) from the Bushehr
seaport (coastal of Persian Gulf),
IranParisa, H.K. , Javad, T.
(2011) *International Food
Research Journal*[View all related documents based
on references](#)[Find more related documents in
Scopus based on:](#)

- 1 Akif, M., Khan, A.R., Sok, K., Min, Hussain, Z., Maal-Abrar, Khan, M., (...), Muhammad, A.
Textile effluents and their contribution towards aquatic pollution in the Kabul River (Pakistan)

(2002) *Journal of the Chemical Society of Pakistan*, 24 (2), pp. 106-111. Cited 28 times.

- 2 Bang, H.O., Dyerberg, J., Hjørne, N.
The Composition of Food Consumed by Greenland Eskimos

(1976) *Acta Medica Scandinavica*, 200 (1-6), pp. 69-73. Cited 727 times.

doi: 10.1111/j.0954-6820.1976.tb08198.x

[View at Publisher](#)

- 3 Barlas, N.
A pilot study of heavy metal concentration in various environments and fishes in the upper Sakarya river basin, Turkey

(1999) *Environmental Toxicology*, 14 (3), pp. 367-373. Cited 52 times.

doi: 10.1002/(SICI)1522-7278(199907)14:3<367::AID-TOX11>3.0.CO;2-9

[View at Publisher](#)

- 4 Begum, A., Amin, Md.N., Kaneco, S., Ohta, K.
Selected elemental composition of the muscle tissue of three species of fish, *Tilapia nilotica*, *Cirrhina mrigala* and *Clarius batrachus*, from the fresh water Dhanmondi Lake in Bangladesh

(2005) *Food Chemistry*, 93 (3), pp. 439-443. Cited 64 times.

doi: 10.1016/j.foodchem.2004.10.021

[View at Publisher](#)

- 5 Birch, E.E., Garfield, S., Hoffman, D.R., Uauy, R., Birch, D.G.
A randomized controlled trial of early dietary supply of long-chain polyunsaturated fatty acids and mental development in term infants

(2000) *Developmental Medicine and Child Neurology*, 42 (3), pp. 174-181. Cited 464 times.

doi: 10.1017/S0012162200000311

[View at Publisher](#)

- 6 Pérez Cid, B., Boia, C., Pombo, L., Rebelo, E.
Determination of trace metals in fish species of the Ria de Aveiro (Portugal) by electrothermal atomic absorption spectrometry

(2001) *Food Chemistry*, 75 (1), pp. 93-100. Cited 117 times.

doi: 10.1016/S0308-8146(01)00184-4

[View at Publisher](#)

- 7 Cunnane, S.C., Francescutti, V., Brenna, J.T., Crawford, M.A.
Breast-fed infants achieve a higher rate of brain and whole body docosahexaenoate accumulation than formula-fed infants not consuming dietary docosahexaenoate

(2000) *Lipids*, 35 (1), pp. 105-111. Cited 166 times.

<http://www.springerlink.com.ezproxy.um.edu.my/content/0024-4201>

doi: 10.1007/s11745-000-0501-6

[View at Publisher](#)