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ABSTRACT

DETERMINATION OF TOXIC AND ESSENTIAL ELEMENTS IN SEA FOOD. Toxic elements, i.e. As, Cd, Cr, Hg, Pb, Sb and Se and essential elements, i.e. Zn and Cu in fish and shellfish had been determined using instrumental neutron activation analysis and atomic absorption spectrometry. Hg in activated samples were determined after radiochemical separation using Pb (DDC)₂ solution in chloroform. The results showed that concentration of the elements studied were still lower than the respective MPC's. The concentration of As, Cd, Cr, Cu, Hg and Se in the fish and shellfish samples were still in natural normal range.

ABSTRAK

PENENTUAN UNSUR-UNSUR LOGAM BERACUN DAN LOGAM ESENSIAL DALAM BAHAN MAKANAN HASIL LAUT. Penentuan logam beracun As, Cd, Cr, Hg, Pb, Sb dan Se, dan logam esensial Zn dan Cu dalam contoh ikan dan kerang telah dilakukan dengan menggunakan analisis aktivasi neutron instrumental dan spektrofotometer penyerapan atom. Hg dalam contoh yang telah diaktifkan ditentukan setelah dilakukan pemisahan secara radiokimia dengan menggunakan larutan Pb (DDC)₂ dalam kloroform. Hasil analisis menunjukkan bahwa kadar logam-logam tersebut dalam contoh ikan masih lebih rendah daripada kadar maksimum yang diizinkan. Kadar As, Cd, Cr, Cu, Hg, Pb dan Se masih dalam batas normal.

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