

INTISARI

LISARNI, A. D., 2014, PENETAPAN KADAR OMEGA-3 UNDIR-UNDIR LAUT (*Emerita emeritus*) DALAM BENTUK GRANUL, BUBUR, SERTA MENTAH SECARA KROMATOGRAFI GAS, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Undur-undur laut adalah sumber daya hayati pesisir yang sebarannya cukup luas dan mempunyai kandungan gizi yang cukup tinggi terutama asam lemak omega-3 yang baik untuk daya ingat. Asam lemak omega-3 terdiri atas asam linolenat, EPA, dan DHA. Undur-undur laut diolah menjadi granul dan bubur instan bayi dengan berbagai proses pemasakan serta pengolahan. Penelitian ini bertujuan untuk membandingkan kadar kandungan omega-3 granul dan bubur yang telah dimasak dengan tepung undur-undur laut mentah tanpa pemasakan.

Undur-undur laut yang didapat, dibersihkan dan dikeringkan kemudian diolah menjadi tepung undur-undur laut mentah, granul yang dikeringkan dengan cara sangrai, granul yang dikeringkan di bawah sinar matahari, bubur instan bayi dengan penambahan undur-undur laut, serta bubur instan bayi tanpa penambahan undur-undur laut (placebo). Sampel diekstraksi menggunakan soxhlet dengan pelarut kloroform:metanol (2:1). Analisis dilakukan secara kromatografi gas dengan fase gerak gas Nitrogen. Kadar omega-3 dihitung dengan persamaan persen relatif dan dianalisis uji *Shapiro Wilk test* untuk uji normalitas.

Hasil penelitian menunjukkan bahwa kadar omega (asam linolenat, EPA, dan DHA) total ekstrak undur-undur laut mentah sebesar 44,416 g/100g, ekstrak granul-sangrai sebesar 52,280 g/100g, ekstrak granul-sinar matahari sebesar 29,489 g/100g, ekstrak bubur undur-undur laut dan bubur-placebo tidak terdeteksi adanya omega-3.

Kata kunci: undur-undur laut, granul, bubur, omega 3.

ABSTRACT

LISARNI, A. D., 2014, DETERMINATION OF OMEGA-3 IN MOLE CRAB (*Emerita emeritus*) ON GRANULE, PUREE, AND RAW BY CHROMATOGRAPHY GAS, SKRIPSI, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Mole crab is the coastal of biological resources are spreading quite extensive and has a high nutrient content, especially omega-3 fatty acids are good for memory. Omega-3 fatty acids consist of linolenic acid, EPA, and DHA. Mole crab is processed into a granule and instant baby puree with a variety of cooking and processing. This study aims to compare the levels of omega-3 content of granule and puree that has been cooked with mole crab raw without cooking.

Mole crab that was acquired, cleaned and dried and then processed into mole crab raw, the roasted dried granule, the granule sun dried, instant puree with the addition of a mole crab, and the instant puree without addition of mole crab (placebo). Samples are extracted using soxhlet with solvents chloroform:methanol (2:1). Analysis using gas chromatography with Nitrogen gas as phases of motion. The content of omega-3 was calculated based on the relative percent and analyzed by *Shapiro wilk test* for normality test.

The result of the experiment showed that total content of omega (linolenic acid, EPA, and DHA) extract of mole crab raw was 44,416 g/100 g, extract of granule-roasted was 52,280 g/100 g, extract of granule-sundried was 29,489 g/100 g, extract of mole crab puree and extract of puree as a placebo was not detected of omega-3.

Keywords : mole crab, granule, puree, omega 3.