

Fatty Acid Compositions of Sea Algae in the of Korea

Sun Nam CHOE · Kang Ju CHOI*

Dept. of Food Science and Technology, Kunsan National University, Kunsan 573-702, Korea

**Korea Ginseng and Tobacco Research Institute, Daejeon 305-345, Korea*

Total lipid contents were 0.58~3.00% in 9 kinds of brown algae, 0.47 ~2.16% in 5 kinds of red algae and 0.55~2.99% in 2 kind of green algae, respectively. Fatty acid compositions of the algae were determined by gas liquid chromatography. Total polyenes and n-3 polyenes of linoleic acid(18:3), stearidonic acid(18:4), eicosapentaenoic acid(20:5) and docosahexaenoic acid(22:6) were 3.88~57.57% and 1.46~25.67% in the brown algae, 5.30~39.75% and 1.17~21.91% in the red algae, and 7.76~19.27% and 3.67%~10.61% in the green algae, respectively. The fatty acid contents and compositions of total polyenes and n-3 polyenes were vary different in the algae groups and sepecies.

Key words : Korean sea algae, fatty acid compositions, n-3 polyunsaturated fatty acids.

* Corresponding author : Kang-Ju Choi

우 305-345

대전광역시 유성구 신성동 302

한국인삼연초연구원 제품개발부

최 강 주 (Tel : 042-866-5323)

(Fax : 042-866-5345)