## Anti-obesity effect by Hizikia fusiformis Extracts treated with the complex enzymes

<u>남보미</u>, 이중헌\* 조선대학교 생명화학공학과 (leejh@chosun.ac.kr\*)

The object of this study were to evaluate the anti-obese effect of Hizikia fusiformis. An active inhibitor was purified from Hizikia fusiformis Extracts treated with the complex enzymes (;Viscozyme, celluclast, Alcalase). The purified inhibitor was identified by thin-layer chromatography, infrared and nuclear magnetic resonance spectroscopy.

Hizikia fusiformis competitively inhibited lipase activities using emulsified triolein and dispersed 4-methylumbelliferyl oleate (4-MU oleate) as substrates.

Lipase activity was also measured using 4-MU oleate as a substrate. The reaction was started by adding lipase (TypeVI-S:fromporicine pancrease). After incubation at 37°C for 30min. The amount of 4-methylumbelliferone released by the lipase was measured fluorometrically at an excitation wavelength of 360 nm and an emission wavelength of 460 nm.