Thesis Title	Dangerous of Formaldehyde in Fresh Cuttle Fish
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Abstract

The formaldehyde concentration in fresh cuttle fish was analyzed by spectrophotometric method. The result revealed that the amount of formaldehyde in fresh cuttle fish before steeping in ice was between 0.074-1.621 mg/kg, the average is 0.374 mg/kg. The average amount of formaldehyde after steeping in ice for 30 , 60 and 120 minutes were 0.132, 0.095 and 0.081 mg/kg respectively. It meant that the formaldehyde concentration after steeping in ice showed significantly lower than before steeping ($p < 0.05$). The formaldehyde concentration in fresh cuttle fish which was steeped in ice decreased reverse with time.

The formaldehyde concentration in fresh-roasted cuttle fish before roasting 20 and 25 minutes were 0.104 mg/kg and 0.113 mg/kg.

After roasting for 20 and 25 minutes showed significantly higher than before roasting ($p < 0.0005$). The average of formaldehyde concentration after roasted 20 and 25 minutes were 0.196 and 0.261 mg/kg respectively. The formaldehyde in the roasting cuttle fish may be caused by the incomplete combustion , or paraformaldehyde and other substances which were contaminated on fresh cuttle fish were oxidized to formaldehyde.

The formaldehyde concentration of fresh cuttle fish before scalding in hot water 1 and 3 minutes were 0.101 and 0.098 mg/kg respectively. After scalding in hot water 1 and 3 minutes it was found that the formaldehyde concentration average were 0.075 and 0.060 mg/kg respectively. It was showed that after scalding in hot water the formaldehyde concentration decreased at significantly difference ($p < 0.0005$).

The average of the formaldehyde concentration of water-washed fresh cuttle fish was 0.104 mg/kg , while the average of the formaldehyde concentration of unwashed fresh cuttle fish was 0.374 mg/kg.

Even though,the formaldehyde concentrations on fresh cuttle fish in this experiment is not so high , but the formaldehyde probably cause tumor and cancer in human. So that for safety the cuttle fish should be washed before cooking.