Meetings International
SciTechnol

J Food Nutr Disor 2018, Volume 7
DOI: 10.4172/2324-9323-C2-012



## The effect of replacing oil with water and NaCl with KCl on soybean oil hydrolysis and oxidation in canned skipjack tuna fish at the end of the 18-month shelf life

**Forouzan Nazari** and **Mohammad Goli**
Islamic Azad University, Iran

The effects of replacing oil with water (0, 3, 6, and 10% based on total net weight of the product) and replacing NaCl with KCl (0, 50, and 100%) at different replacement levels were surveyed. Hydrolysis (acidity number), peroxide value, and thiobarbituric acid (TBA) index were evaluated at the end of the 18-month shelf life in canned skipjack tuna fish. Results showed that the TBA index was not affected, whereas the peroxide value was affected by replacing oil with water and NaCl with KCl ($p<0.05$), so that by increasing in replacing oil with water and replacing NaCl with KCl, the peroxide value was significantly decreased ($p<0.05$). Hydrolysis (acidity number) was affected by replacing oil with water ($p<0.05$); however, it was not affected by replacing NaCl with KCl ($p>0.05$). It was found out the best suggestion is 10% replacing oil with water and 50% replacing NaCl with KCl.

mgolifood@yahoo.com

**Notes:**