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## **Effect of Added Water on Flow Property and Oil Droplet Size of Fish Meat Emulsion Containing Egg-Yolk**

[Teruo NAKAYAMA](#)<sup>1)</sup>, [Makiko MURASE](#)<sup>1)</sup>, [Hiroko TOMITA](#)<sup>1)</sup>*1) Faculty of Bioresources, Mie University*

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Fish meat emulsion was prepared from egg-yolk, very low lipid sardine meat suspended in weak alkaline solution, salad oil, and vinegar. The effect of water on the flow properties and oil droplet size was investigated. In the gross flow curve, the loop area of the flow curve was small and the small sized oil droplets dispersed. When the oil ratio was increased to 1.6, the flow property changed to a state of storage. In the suspended-meat emulsion irrespective of the oil ratio, the loop area was large with large oil droplets at water ratios of 0 and 0.2 and became smaller with smaller oil droplets at water ratios of 0.2 and 0.1. A water ratio of 0.1 was in the intermediate state between the irreversible

and the thixotropy. At an oil ratio of 1.1 with this water ratio, both moderately large loop areas were observed. At an oil ratio of 1.6, the flow and the shear thickening ones were observed during irreversible flow. At smaller oil droplets were dispersed more uniformly in the sample with a moderately large loop area or the shear thickening type breakdown.

**Keywords:** [fish meat emulsion](#), [added water](#), [egg-yolk](#), [flow property](#)

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