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Microstructure of Fish Meat Emulsion with Addition

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Fish meat emulsion was prepared from egg-yolk, very low-lipid sa prepared through grinding or suspending in weak alkaline solution). The microstructures of the oil droplet surface and myofibrillar matrix. Polytron homogenization, the myofibrils were shattered to a much smaller size in the fish meat emulsion, according to the original smaller fragment size. The structure was formed by the myofilaments spread apart from the shattered myofibrils in the emulsion. The mesh size of this structure was smaller in the ground-meat emulsion than the suspended-meat one and corresponded to the oil droplet size. In the fish meat emulsion, the oil droplet size was smaller at oil ratio 1.1 to sardine :

1.6. In the non-fish conventional emulsion, the viscosity increase due to the addition of oil droplets to the egg-yolk matrix was not sufficient to prevent irreversibility induced by coalescence. In fish meat emulsion, the network structure showed a remarkable increase in viscosity and held the oil droplets in place. The application of high shear rates to prevent the coalescence and exhibit thixotropy.

Keywords: [fish meat emulsion](#), [microstructure](#), [egg-yolk](#), [oil droplets](#)

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