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## The Pretreatment Condition for Preparation of Grannule and Powder Tea with Sea Tangle. Laminaria japonica

Ji-Man Kwak, Ok-Soo Choi\*, Wook-Min Park, Hae-Sub Kim and Tae-Jin Bae

Division of Food Technology and Nutrition, Yosu National University, Yosu 550-749, Korea \*Division of Food Science, First College, Sunchon 540-744, Korea

In proportion to the progress in medical science, the average life span and physical constitution improved prominently. But increase of circle-system disease such as obesity, arteriosclerosis, heart disease etc arise from excessive ingestion of animal fat and protein as emphasis of tasty aspect in nutrition. Sea tangle, Laminaria japonica was contained abundantly indigestible alginic acid by way of dietary fibrin which was emitted action of harmful factor and heavy metals. Therefore, this study make an attempt development of granule and powder tea of high value added by use of sea tangle with functional properties as well as various nutritions. We were investigated changes of moisture, ash, viscosity of sea tangle by chemical and physical treatment. Sea tangles were grinded by 10, 30, 50 and 100mesh, respectively and they were roasted during the 2, 3, 5 and 7min. Treated powder teas with acetic acid, sodium bicarbonate, dipotassium hydrogenphosphate, distilled water at 80°C, concentration of 0.2%, during 20min the lowest moisture contents were showed 98.850, 98.869, 98.699 and 98,901%, the highest ash contents 0.332, 0.340, 0.427 and 0.346% from particle size of 50mesh, respectively. Viscosity of powder tea in the particle size of 50mesh was showed high value generally, but it was not found significant difference. The optimum particle size and roasting time of granule tea was following: water 50mesh 7min, sodium bicarbonate 50mesh 3min, dipotassium hydrogenphosphate 50mesh 3min and acetic acid 100mesh 5min respectively. Viscosities of granule teas of non roasting and roasting treatment for acetic acid, sodium bicarbonate, dipotassium hydrogenphosphate, distilled water were shown 5.08, 10.34, 28.4, 7.32cP and 2.03, 2.68, 77.25, 3.27cP, respectively.