

**Title: Evaluation on the Processing Feasibility of Fish Sauce by Adding Tuna Cooking Juice***Dr. Kuo-Chiang Hsu\* and Chia-Ling Jao*Professor  
China Medical University  
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The purpose of this study was to add tuna cooking juice in the salting process of shoyu fermentation. After making koji, the activities of amylase and protease reached 25.01 and 139.36 unit/g. Total nitrogen and amino-nitrogen contents of soybean sauce were 2.16 and 0.675 g/dl. After aging, the reducing sugar, acidity, protein utilization ratio and hydrolysis ratio of soybean sauce were 76.40 mg/ml, 0.849 g/dl, 85.11% and 31.34%. The total free amino acid content of black bean sauce was 30.49 mg/ml, and that of soybean sauce was 38.88 mg/ml. Glu was the abundant free amino acid in all the sauces. The alcohol content of black bean sauce was 8.84 mg/ml, and that of soybean sauce was 3.89 mg/ml. Putrescine was the most content in all the amines, black bean sauce was 327.02 µg/ml, soybean sauce was 310.98 µg/ml, and all the amines were agreeable to the food safety.

**Biography**

Dr. Kuo-Chiang Hsu completed his doctorate in Food Science with the theoretical and practical combination of protein hydrolysis and purification technologies at the National Chung Hsing University in 2002. And now he is a Professor of Department of Food and Beverage in Tung-Fang Design University in Taiwan. Dr. Hsu completed his doctorate in Food Science with the application of hydrostatic pressure on food processing also at the National Chung Hsin University in 2002. Dr. Hsu joined as an Assistant Professor in the Department of Health Diet and Restaurant Management, Chung Shan Medical University in 2004, and then served as an Associate Professor in Department of Nutrition, China Medical University in 2008. He went to the Faculty of Land and Food Systems, The University of British Columbia as a Visiting Associate Professor to research the bioactive peptides derived from Atlantic salmon skin gelatin in 2010-2011, and he got the promotion to a Professor in 2011. Dr. Hsu collaborated with Dr. Jao for the evaluation of the bioactive characteristics of peptides since 2008. They have successfully developed some peptides with various bioactive characteristics, such as antioxidative, antihypertensive and antidiabetic activities, from food processing by-products. They contributed to provide a new thought to change the valueless by-products to functional foods.