

Consumer preference and mechanical properties of Korean menu with cooked mineral water

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Abstract

The purpose of this study was to investigate the consumer preference characteristics and mechanical properties of Korean menu for different cooking water. Mineral water(manufactured by Orion Jejuyoungamssoo corp.) and commercial bottled water were used in the cooking water. For consumer preference, there were seven kinds of Korean food menu including sagol gomtang, patjuk, white rice, dongchimi, sujeonggwa, omija, doenjang stew. Samples used for sensory evaluation were presented to the panel in a white container, and the 9 point scale was used. Hardness, strength, cohesiveness, springiness, gumminess and brittleness were evaluated using potatoes and sweet potatoes to determine mechanical properties. Preference for overall taste, aftertaste, and degree of sticky of rice was significantly higher in mineral water than that of bottled water ($p<0.05$). In the case of sagol gomtang, the preference for thick and deep flavor ($p<0.05$) and the preference for richness ($p<0.1$) were significantly higher in mineral water. Preference for taste and flavor of omija was high ($p<0.01$), and the preference for flavor, texture, and aftertaste of patjuk ($p<0.1$) was higher in mineral water than in bottled water. There was no significant difference in the consumer preference for the sujeonggwa, dongchimi and doenjang stew. In the mechanical properties test, potatoes cooked with mineral water showed high strength against gumminess and brittleness. Also, sweet potatoes cooked with mineral water were significantly strong against cohesiveness and brittleness. As a result, the quality of rice and sagol gomtang was improved in mineral water, and it was found that the strength of solid ingredient was increased during cooking.

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Keywords: *Consumer preference, mechanical property, mineral water, Korean menu*

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