Effect of water content and steaming steps on quality characteristics of steamed rice cake

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This study aims to compare the quality characteristics of steamed rice cake added with diluent water at different ratios and applying steam for various times. Rice cake was prepared with two levels of water (60, 65%) and by steaming for 6, 8 and 10 min. The central temperature of rice cake in steamer was measured for 10 min. The maximum temperature of rice cake with 65% water content was 101.0±0.2°C with the steepest gradient in increasing temperature slope among rice cakes prepared with two levels of water content. It indicated that there is a relationship between water content and steaming temperature profile. Texture analysis profile of steamed rice cakes were investigated by compression test. The rice cake with 60% water content and which was steamed for 6 min (W65_S6) showed the highest value in hardness (46.93±2.04 N) and adhesiveness (29.18±4.14 N. Sec). In conclusion, these results can be helpful to optimize steam processing and adding water content to achieve desirable quality, texture, and mouth feel of steamed rice cake.

Biography

Eunhye Choi is graduated from Sejong University in 2012 and she is interested in food processing field especially about cereal-based bakery. Now she is studying her master's degree in food science and technology at food nanotechnology laboratory in Sejong University, Korea.

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