



The Effects of Using Seaweed on the Rheological Properties of Asian Alkaline noodles

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Abstract : Seaweeds contain high levels of minerals, vitamins, essential amino acids, indigestible carbohydrates, and dietary fiber. The objective of this study was to use two type of seaweed such as Gracilaria and Ulva seaweed powder as an ingredient to make Alkaline noodle products of high nutritional quality with rich fiber content. The effect of wheat flour substitution with Gracilaria and Ulva seaweed powder was investigated in terms of the rheological qualities of Asian Alkaline noodles. Five additional noodles were prepared by substituting wheat with 0, 1, 3, 5 and 7% Gracilaria and Ulva seaweed powder. The results shows that as the noodle containing 5% Gracilaria and Ulva seaweeds possessed the highest value of storage modulus G'' , it was possible to infer that 7% produced the least elastic cooked noodles, and 5% produced the most elastic cooked noodles. This indicate that further addition of seaweed also might have reinforced the seaweed was sufficient to bind of moisture but insufficient to fully exert the influence of seaweed over moisture..

Keywords : Seaweed, Gracilaria, Ulva, Alkaline noodle, Rheological properties.

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