ABSTRACT

Effects of blanching time were investigated to know total anthocyanins, total phenolic, and antioxidant activity of purple sweet potato flour and its effects on the boiled noodles resulted. Boiled noodles were made by substituting purple sweet potatoes that were blanched for 5, 10, and 15 minutes before drying process with three different levels substitution purple sweet potato flour (15%, 20%, and 25%). Blanching time for 15 minutes could inactivate peroxide enzyme and polyphenol oxidase enzyme of purple sweet potato. Drying process could decreased total anthocyanins, total phenolic, and antioxidant activity of purple sweet potato flour because of degradation compound by polyphenol oxidase enzyme. Blanching for 15 minutes had the highest total anthocyanins, total phenolic, and antioxidant activity. Substituting purple sweet potato flour for 25% in boiled noodles resulted the highest total anthocyanins and total phenolic, and moreover its antioxidant activity. However, substitution decreased the water absorption and increased their cooking loss. Furthermore, the substitution improved in colour, flavour, taste, texture, and acceptability of boiled noodles.

Keywords: boiled noodles, blanching time, substitution, antioxidant activity, anthocyanins, phenolic,

References: 47 (1990-2010)