THE EFFECT OF THERMAL COOKING METHOD ON ANTIOXIDANT CONTENT IN ORANGE AND PURPLE SWEET POTATOES

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ABSTRACT

THE EFFECT OF THERMAL COOKING METHOD ON ANTIOXIDANT CONTENT IN ORANGE AND PURPLE SWEET POTATOES

The study was aimed to determine the effect of thermal cooking method on antioxidant content in orange and purple sweet potatoes (β -carotene, vitamin C, antioxidant activities and total phenolic content) of orange and purple sweet potatoes. The effect of fresh sweet potato and different thermal cooking process (boiling and steaming) on antioxidant content were determined. The results of the study revealed that thermal cooking process cause significant decrease in total phenolic content, ascorbic acid, β -carotene and antioxidant activities both orange sweet potato and purple sweet potato. Result shows that purple sweet potato has higher total phenolic content and antioxidant activity compared to orange sweet potato. However, in term of vitamin C and β -carotene, orange sweet potato showed the higher value. In view of this study, it can be concluded that thermal cooking process of sweet potato decreased the antioxidant contents and the most suitable thermal cooking processes and good to preserve antioxidant determined to be steaming cooking processes. The purple sweet potato shows higher antioxidant activity compared to orange sweet potato.