

The Effects of Blanching, Boiling and Steaming on Ascorbic Acid Content, Total Phenolic Content, and Colour in Cauliflowers (*Brassica oleracea* var. *Botrytis*)

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Abstract : The effects of blanching, boiling and steaming on the ascorbic acid content, total phenolic content and colour in cauliflower (*Brassica oleracea* var. *Botrytis*) was investigated. It was found that blanching was the best thermal processing to be applied on cauliflower compared to boiling and steaming processes. Blanching and steaming processes on cauliflower retained most of the ascorbic acid content (AAC) compared to those of boiling. As for the total phenolic content (TPC), blanching process retained a higher TPC in cauliflower compared to those of boiling and steaming processes. There were no significant differences between the TPC of boiled and steamed cauliflowers. As for the colour measurement, there were no significant differences in the colour of the cauliflower at different lead time (after processing to the point of consumption) of 30 minutes interval up to 3 hours but there were slight variations in L*, a*, and b* values among the thermal processed cauliflowers (blanched, boiled and steamed). The cauliflowers in this study were found to give a desirable white colour (L* value in the range of 77-83) in all the three thermal processes (blanching, boiling and steaming). There was no significant difference on the effect of lead time (30-minutes interval up to 3 hours) in raw and all the three thermal processed (blanched, boiled and steamed) cauliflowers.

Keywords : ascorbic acid, cauliflower, colour, phenolics

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