

Color Degradation and Changes in Chlorophyll Contents of Leafy Vegetables by Conventional Blanching

H.K. CHUN, T. AHN*, H.J. PARK, J.S. CHOE, J.J. HONG

Agriproduct Processing Division, Rural Resources Development Institute, NIAST, RDA

This study was carried out to determine the optimum blanching times for spinach, leaf beet and marsh mallow based on the vegetables' green color. The effects of blanching time on color degradation and changes in chlorophyll contents in leafy vegetables were investigated. 30 sec, 3 min and 20 min are suggested as the optimum blanching times for spinach, leaf beet and marsh mallow. Spinach and leaf beet (*Chenopodiaceae*) showed similar color degradation, while marsh mallow (*Malvaceae*) showed a different pattern of changes. Chlorophyll contents were greatly increased by blanching. Chlorophyll b (C_b) showed a greater increase than chlorophyll a (C_a) in spinach and leaf beet, while in marsh mallow, C_a showed a greater increase than C_b . The ratio of C_a / C_b in most samples were in the range of 2.0~3.6 and did not show remarkably changes by blanching and according to blanching time. In addition, total chlorophyll changes in spinach and leaf beet (except in spinach blanched for 5 min) corresponded to changes in C_a , while total chlorophyll changes in marsh mallow corresponded to changes in C_b .

* 담당자: 안태현 (Taehyun Ahn)

* Tel : 031-299-0579 (C) 010-7194-1822

* Fax : 031-299-0553

* E-mail: happyt27@rda.go.kr