



2º ENCONTRO DE QUÍMICA DE ALIMENTOS

Sociedade Portuguesa de Química • Grupo de Química Alimentar

Livro de Resumos



19 a 21 de Julho de 1995

Universidade de Aveiro



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IMMERSION TIME FOR ASCORBIC ACID DIPPING OF CUT APPLE
(cv. JONAGORED) QUALITY

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The enzymatic browning of raw fruits used in salad bars, represents a difficult problem for the food processing industry, especially with recent restricts in the use of sulfites in such foods, by the Food and Drug Administration (Sapers et al., 1989).

These kind of reactions may cause undesirable quality changes during handling, processing and storage of fruits. Apple is a perfect example of a fruit susceptible to enzymatic browning (McNicoli et al 1991). Ascorbic acid is probably the most frequently chemical additive used for browning control of apple products (Ponting et al., 1972, Santerre et al., 1988, Sapers et al., 1989, Sapers et al., 1990, Sapers et al., 1991 and Sapers and Ziolkowski, 1987).

Several factors are involved in the action os ascorbic acid in the apple tissue. Studies have been performed to evaluate the influence of the concentration used (Ponting et al., 1972), method of application, such as vaccum impregnation, pressure infiltration or dipping (Santerre et al 1978, Sapers et al., 1990). However another important factor must be considered, that is the immersion time of the apple in the treatment solution, since an important relationship exists between the immersion time and the diffusion of the chemical into the tissue (Monsalve-Gonzalez et al., 1993).

The objective of this study was to test the influence of the dipping time in 0.75% ascorbic acid on several physicochemical characteristics of cut apple (cv. Jonagored).

Five minutes was found to be the desirable period of immersion since it allowed an efficient diffusion of the acid into the tissue. An increase in this time did not determine significant improvements on quality.

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