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Convective dehydration processing of peach

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Dehydration of peach is an alternative to enhance storage stability, minimize packaging requirement and reducing post-harvest cost without a sensorial and nutritional quality loss. Preservation of fruits through sun drying techniques is practiced in Cova da Beira (a Portuguese region that has a protected geographical indication for peach), as a homemade process without quality and safety control.

The aim of this work was to prepare quality dehydrated products based on a convective drying process with low cost. This process has short drying time and controlled temperature that causes minimal damage to the product without added preservatives or sugar.

The samples of 'Baby Gold' cultivar (*Prunus persica*) obtained from local producer were peeled, laminated and immediately dehydrated. Samples were stored in sealed plastic containers at 25°C for subsequent analysis. In the drying process were controlled forced convection air velocity of 1.25 to 1.50 m/s, air temperature between 45 and 75°C and drying time between 7 to 11 hours. During dehydration process temperature and fruit moisture were controlled. pH, acidity, soluble solids content (SSC) and mesophilic aerobic count were performed in fresh and dehydrated fruit.

Dehydrated peach were similar to homemade products. Moisture was below 12%, without significant variation of SSC and acidity (on a dry basis). No deleterious effect occurred on peach mesophilic aerobic count, since a slight decrease was registered between fresh and dehydrated fruit.