

NEW PRODUCTS OF AVOCADO (*Persea americana* Mill): PASTE AND PIECES OBTAINED BY OSMOTIC DRYING.

M. Schwartz¹, J.A. Olaeta², P. Undurraga², M. Sepúlveda¹ and P. Tepper

¹Universidad de Chile. Facultad de Ciencias Agronómicas. Departamento de Agroindustria y Enología. Casilla 1004, Santiago, Chile. E-mail: mschwartz@uchile.cl

²Pontificia Universidad Católica de Valparaíso. Facultad de Agronomía. Casilla 4-D, Quillota, Chile. E-mail: jolaeta@ucv.cl

The phenomenon of mass transfer during the osmotic dehydration of avocado pear (*Persea americana* Mill) was studied in order to preserve this fruit, keeping its organoleptic characteristics. The process was carried out using 1-centimetre thick crescent-shaped pieces of avocado, and three osmotic solutions (in which pH was adjusted in 2): NaCl 20% w/v (T₁); maltodextrin (DE = 18-22) 60% (T₂) and the mixed solution NaCl 10%-maltodextrin (DE = 18-22) 50% (T₃). The pieces were completely immersed for six hours, at ambient temperature. The pieces were ground and vacuum-packed in polyethylene bags after osmotic dehydration. The weight loss (PP) was evaluated and reached 5.7, 17.5 and 30.3% in T₁, T₂ and T₃, respectively. The highest level of water loss (PA) occurred in T₃ (39.4%), meanwhile the PP level only reached 14.8 and 22.4% in T₁ and T₂, respectively. The soluble solids gained (SG) reached values of 8.5, 4.4 and 9.2% in T₁, T₂ and T₃, respectively. Water activity (a_w) decreased an initial value of 0.968 to 0.907, 0.965 and 0.910 with T₁, T₂ y T₃, respectively. In relation to color, the L* parameter decreased from 60.7 to 54.8, 57.3 and 50.9 in T₁, T₂ y T₃, respectively. The a* parameter increased (i.e. became less negative) in all the treatments. The b* parameter decreased in T₁ and T₃ but increased in T₂. The pieces and pulp exposed to air during 24 hours did not become darker, keeping the normal green color of the fruit.