Product and process development: strawberries (*Fragaria ananassa Duch*) pasteurized in flexible transparent packaging

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Flexible packaging has several advantages over conventional cans, amongs other, lower weight and volumen (transport and storage) easy-open (convenience), requires much less processing time (energy and quality). Canned fruits, in particular strawberries is a marketable candidate to be developed using flexible transparent packaging.

The objective of this study was to develop the corresponding thermal process to obtain pouch-packed, pasteurized strawberries and to evaluate its quality (color and texture).

Strawberry (*Fragaria ananassa Dutch*) was pasteurized at 90 ° C in flexible pouches and in conventional cans. *Alicyclobacillus acidoterrestris* was considerd as target microorganism, to determine the processing time. The developed products were characterized with measurements of Color, texture, pH and soluble solids. Also, the products were compared in terms of color and texture, with the best product available in the market. Significant differences were tested using ANOVA and Tukey statistical test.

Strawberries, color and texture did not have significant differences when processed in flexible and conventional tin cans. The coordinates CIELAB a* were 23.81 ± 1.40 and 22.95 ± 1.61, for pouch and cans packed strawberries, respectively; Texture values were 439 ± 242 and 502 ± 239, for pouch and cans packed strawberries, respectively. Additionally, the brine requires in flexible pouches was 70% of that required for tin cans. The new process is feasible in terms of quality paramenters, but color should be improved, if the product is packed in transparent pouches.