

RESEARCH PROJECT

 Institute
Life Technologies

Control of Salmonella on almonds and pistachios

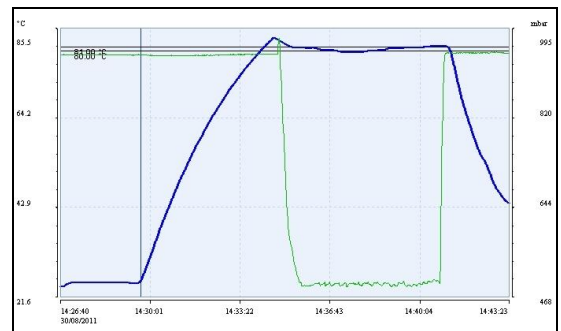
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Description After salmonella outbreaks in the U.S.A. linked to almonds, pistachios and peanuts, FDA wants a guaranteed “kill step” for these products, and more important, expects producers to validate all such processes, proving that the kill step works. A new thermal process for nuts has been developed by Bühler Barth AG in cooperation with RPN Foodtechnology AG. The Control Condensation Process (CCP) is undertaken in a steam atmosphere and aims the reduction of *Salmonella* on pistachios of at least 5 log. The objective of our experiments was to build-up a small equipment enabling us to reproduce the CCP process in the laboratory with exactly the same characteristics concerning time, temperature and pressure of the heat treatment. Using this set-up the killing effect of the process on two *Salmonella* strains (*S. montevideo*, *S. enteritidis*) and a non pathogenic surrogate (*Enterococcus faecium*) can be measured. The trials are carried out on pistachios with and without shell and enabled the authorization of the full-scale process by the Californian Authority.



Lab scale equipment of a CCP process



Time, temperature and pressure of the pasteurization of pistachios

URL <http://itv.hevs.ch/>

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