



Thermal Process and Microorganisms of Concern

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Abstract:

Sterilized products. According to fda definition, the thermal process has the goal to ensure the destruction of all the germs capable of growing at the normal – non refrigerated storage conditions. This means all mesophilic sporeformers and vegetative. Microorganisms of concern. Pathogen: cl botulinum, b.cereus; banal spoilage: cl. Sporogenes, b. Subtilis. Control factors. Major: heat treatment parameters. Minor: ph, storage temperature (lower than 37°C). Pasteurized products. The thermal process is a “chill pasteurization” and has the goal to ensure the destruction of all path. /vegetative bacteria and to achieve a minimum 30 days stability at refrigerated storage conditions. Microorganisms of concern . Pathogen: s. Aureus, listeria monocy.(the most heat resistant cells of path.). Banal spoilage: yeasts and molds, enterobacteria, psicroph. Germs. Control factors. Major: heat treatment, chilling time, storage temperature. Minor: ph, kind of substratum.

Biography:

Microbiologo / Tecnologo alimentare con ultra 40ennale esperienza in processi tecnologici della maggior parte degli alimenti di origine vegetale, ittica, carni (non processi di stagionatura). Esperto di analisi microbiologiche e chimico-fisiche, ha condotto un proprio Laboratorio per prove di simulazione processi industriali, accreditato iso 17025(ACCREDIA) per analisi microb. e ch.-fisiche. Competente nella diagnostica delle cause di alterazione e/o insufficiente durabilità.

In grado di affrontare qualsiasi problema legato alla con-



servazione degli alimenti. Attualmente agisce come consulente nelle specialità sottoelencate. Specialties: Progettazione / ottimizzazione Preparazioni alimentari “chilled” o “pasteurized - chilled”, gastronomia, piatti pronti, paste fresche. Valutazione processi termici (sterilizz. e pastorizz.) anche con tecnologie alternative (Microonde, Fotovoltaico, ecc)

Publication of speakers:

1. Cani PD. (2018). Human gut microbiome: hopes, threats, and promises. Gut. 67:1716–25.
2. Cenit MC, Sanz Y, Codoner-Franch P. (2017). Influence of gut microbiota on neuropsychiatric disorders. World J Gastroenterol. 23:5486–98.
3. Chang JY, Antonopoulous DA, Kaltra A, et al., (2008). Decreased diversity of the fecal Microbiome in recurrent Clostridium difficile-associated diarrhea. J Infect Dis.197:435–438.
4. Costello SP, Hughes PA, Waters O, Bryant RV, Vincent AD, Blatchford P, et al., (2019). Effect of fecal microbiota transplantation on 8-week remission in patients with ulcerative colitis: a randomized clinical trial. JAMA. 321:156–64.

Webinar on Applied Microbiology & its applications

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