

Year	Reference	Food Product	Microbe Tested	Spores?	HPP Conditions	Antimicrobial Also Tested?	Holding Time	Results
2014	(23)	Alternatively-cured frankfurters	<i>Listeria monocytogenes</i>	No	400 and 600 MPa for 4 min	Cranberry powder, dried vinegar and lemon juice/vinegar concentrates, and post-lethality interventions (lauric arginate, octanoic acid)	1–98 days at 4°C	Lauric arginate, octanoic acid, and high hydrostatic pressure (400 MPa) reduced <i>L. monocytogenes</i> populations by 2.28, 2.03, and 1.88 log <sub>10</sub> CFU per g compared to the control. <i>L. monocytogenes</i> grew in all post-lethality intervention treatments, except after a 600 MPa high hydrostatic pressure treatment for 4 min. Cranberry powder did not inhibit the growth of <i>L. monocytogenes</i> , while a dried vinegar and a vinegar/lemon juice concentrate did. The 400 MPa treatment resulted in an extended lag phase and slower increase in <i>L. monocytogenes</i> populations, but growth occurred after 56 days of storage.
2014	(38)	Carrot juice	<i>Bacillus licheniformis</i>	Yes	400-600 MPa at 40–60°C for 0–40 min	(pH)	None	The pH reduction of low-acid foods showed a significant enhancement of rate of destruction of <i>B. licheniformis</i> spores.
2014	(28)	Cold-smoked salmon	<i>Listeria monocytogenes</i>	No	450 MPa for 5 min	Reuterin	35 days at 4°C	Combined treatment with reuterin and HPP prevented the pathogen recovery observed with the individual treatments.
2014	(25)	Cooked chicken	<i>C. botulinum</i>	Yes	600 MPa for 2 min at 20°C	2% sodium lactate (also oxygen-permeable packaging and <i>Weissella viridescens</i> as a protective culture)	8°C	<i>C. botulinum</i> spores can germinate and grow in pressure-treated, cooked chicken during storage at 8°C. As the shelf-life of cooked chicken is extended significantly by HPP, some method of controlling <i>C. botulinum</i> during extended storage is necessary. Germination and growth was controlled by the addition of 2% w/w sodium lactate or by the use of oxygen permeable packaging.
2014	(1)	Cracked green table olives	Yeasts and bacteria	No	200–700 MPa for 5 min	Nisin, ascorbic acid, thyme or rosemary oil in high and low salt brines	Up to 5 months at 25°C	Pressure treatments as low as 300 MPa for 5 min have a dramatic effect on yeast populations in olives. Treatments at 400 MPa for 5 min achieve sufficient inactivation of yeasts to avoid regrowth in seasoned brines for ≥3 months. Nisin added to the brines reduced bacterial counts by 1.4 log cycles, but had no effect on yeasts when tested singly or in combination with HPP treatment (400 MPa, 5 min). Thyme oil had almost no effect on yeast concentrations, but rosemary oil reduced yeast viable counts progressively during storage. Essential oils in combination with HPP (400 MPa, 5 min) significantly reduced numbers of aerobic mesophilic bacteria. Low-salt brined olives purged with N <sub>2</sub> or supplemented with ascorbic acid and then pressurized for 5 min at 450 or 550 MPa were preserved for up to 5 months without spoilage.

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2014	(5)	Cured beef carpaccio	<i>Listeria monocytogenes</i> , <i>Salmonella enterica</i> , <i>E. coli</i> O157:H7	No	450 MPa for 5 min	Lactoperoxidase system or activated lactoferrin	7 days at 8°C or 22°C	HPP reduced pathogen levels by 1–3 log units and the antimicrobial effect remained during 7 d of storage at 8 or 22°C. The individual application of LPOS and ALF did not affect the survival of the three pathogens studied during storage. However, a synergistic bactericidal interaction between LPOS and HPP was observed against <i>S. enteritidis</i> and <i>E. coli</i> O157: H7. Combined treatments of HPP with LPOS would be useful to reduce the intensity of pressurization treatments diminishing changes in the quality of meat products.
2014	(19)	Egg patty mince and green pea puree	<i>Bacillus amyloliquifaciens</i>	Yes	700 MPa for 3–16 min at 105–121°C	None	8 weeks	Treatments at 700 MPa in combination with 105°C for 16 min, 115°C for 5 min, or 121°C for 3 min, decreased spore populations to levels undetectable using an enrichment procedure. No significant recovery of pressure-injured spores was observed during storage for 8 weeks.
2014	(14)	Fresh fish	Total mesophilic and total psychrophilic microorganisms	No	Not listed in abstract	Chitosan-based edible film coating	At least 24 days at 4°C	Shelf life increases of 4 days in HPP group samples, 8 days in chitosan (CFW) group samples and 24 days in HPP+CFW group samples were observed in comparison with the control group.
2014	(6)	Frozen and unfrozen beef mince	<i>E. coli</i>	No	300 MPa for 5 min at -10, -5, 0, 10, and 20°C	None	None	Microbial inactivation in beef mince was enhanced by freezing the beef mince prior to pressurization.
2014	(4)	Fruit extract matrix	<i>Listeria monocytogenes</i>	No	300-500 MPa for 5–15 min	Stevia rebaudiana	None	A treatment of 453 MPa for 5 min with a 2.5% (w/v) of Stevia succeeded in inactivating over 5 log cycles of <i>L. monocytogenes</i> .
2014	(24)	Ready-to-cook poultry meat	<i>Salmonella</i> , <i>Listeria monocytogenes</i>	No	200, 350, and 500 MPa for 2–14 min	Potassium lactate (0 or 1.8% w/w)	20 days at 6°C	A model was established (using the data collected and the literature) to recommend combinations of HPP treatment and lactate formulation to guarantee an acceptable microbial load before cooking.
2014	(16)	RTE cooked meat products	<i>Listeria monocytogenes</i> , either freeze-stressed or cold-adapted	No	400 MPa for 5 min	None	4–12°C	<ul style="list-style-type: none"> <li>• Freeze-adapted cells were more pressure-resistant.</li> <li>• Different models were needed for a lean vs. a fatty meat product.</li> <li>• A predictive model was established and evaluated successfully.</li> </ul>

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2014	(22)	RTE ham	<i>Listeria monocytogenes</i>	No	400–600 MPa	Cranberry powder, dried vinegar and lemon juice/vinegar concentrates, and post-lethality interventions (lauric arginate, octanoic acid) and post-processing thermal treatment (PPTT)	1–98 days at 4°C	This study compared HPP to other antimicrobial and postlethality approaches. Lauric arginate, HPP at 400 MPa, and octanoic acid reduced <i>L. monocytogenes</i> population compared to the control after 1 day of storage by 2.38, 2.21, and 1.73 log CFU/g, respectively. PPTT did not achieve a significant reduction in <i>L. monocytogenes</i> populations. <i>L. monocytogenes</i> recovered and grew in all post-lethality intervention treatments except HPP at 600 MPa. Cranberry powder did not inhibit the growth of <i>L. monocytogenes</i> , while dried vinegar and lemon juice/vinegar did.
2013	(32)	Apricot juice	<i>Saccharomyces cerevisiae</i>	No	100 MPa for 1–8 successive passes	Citral	Up to 20 days at 10°C	Cell viability decreased with the increases of passes at 100 MPa. HPP treatments and citral addition increased juice shelf-life of 6–8 days. HPP treatments were able to potentiate antimicrobial activity of citral.
2013	(3)	Dry-cured ham	<i>E. coli</i> O157:H7	No	400–500 MPa for 10 min	Nisin or pediocin	60 days at 8°C	A synergistic antimicrobial effect was registered when 400 MPa and 500 MPa for 10 min combined with nisin were applied. After 60 d, this synergistic effect was only maintained with the combined treatment of 500 MPa and nisin. Counts of <i>E. coli</i> in dry-cured ham were not affected by either nisin or pediocin applied individually, whereas counts in pressurized samples were 3 log units lower than in non-treated dry-cured ham after 60 d of refrigerated storage.
2013	(37)	Low-acid fermented sausages	<i>Listeria monocytogenes</i> , <i>Staphylococcus aureus</i>	No	600 MPa for 5 min at the end of ripening	Bioprotective Enterococcus strains	1 week at 14°C	<i>Enterococcus faecium</i> and <i>Enterococcus devriesei</i> strains dominated all over the process and storage. ► All the inoculated enterococci strains avoided the growth of <i>Enterobacteriaceae</i> . ► <i>Staphylococcus aureus</i> was not able to growth during the ripening process in any batch. ► <i>E. faecium</i> reduced <i>Listeria monocytogenes</i> counts immediately after stuffing. ► The combination of <i>E. faecium</i> and high hydrostatic pressure was the most efficient antilisterial approach.
2013	(11)	Orange and apple juice	<i>E. coli</i> O157:H7	No	175–400 MPa for 20 min	Various essential oils, including limonene and citrus fruit Eos	None	Limonene inactivated 5 log <sub>10</sub> cycles of the initial <i>E. coli</i> O157:H7 population in combination with HPP (300 MPa for 20 min) in orange and apple juices, and a direct relationship was established between the inactivation degree caused by the combined process with limonene and the occurrence of sublethal injury after the HPP treatment.

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2013	(11)	Raw sardine fillets	Total viable counts, H <sub>2</sub> S producing microbes, total mesophilic counts, <i>Pseudomonas</i> spp., Enterobacteriaceae, and lactic acid bacteria	No	300 MPa for 10 min at 7°C	A composite gelatin-lignosulphonate film	17 days at 7°C	The combined use of GLS film with high pressure reduced microbial growth during chilled storage.
2013	(26)	Sliced fermented sausages	<i>Listeria monocytogenes</i>	No	600 MPa, 5 min, 12°C	Nisin	90 days	► <i>Listeria monocytogenes</i> was inactivated progressively during the product shelf life. ► Active packaging containing nisin induced a stronger reduction of <i>L. monocytogenes</i> . ► HPP alone had no antimicrobial effect against <i>L. monocytogenes</i> . ► Low water activity and lactate exerted a protective effect against HPP. ► Active packaging reduced the level of <i>L. monocytogenes</i> in sausages with no added sodium salt.
2013	(29)	Sliced RTE ham and turkey breast	<i>Listeria monocytogenes</i>	No	600 MPa for 3 min	Sodium chloride (1.8% or 2.4%) and sodium nitrite (0 or 200 ppm)	28 days at 4°C	HPP at 600 MPa for 3 min resulted in a 3.85–4.35 log CFU/g reduction in <i>L. monocytogenes</i> . With formulations at similar proximate analyses, there were few significant differences between ham and turkey with or without with HPP. There were no differences in growth of <i>L. monocytogenes</i> due to sodium chloride level. Sodium nitrite provided a small, but significant inhibition of <i>L. monocytogenes</i> without HPP, but addition of sodium nitrite did not significantly affect growth of <i>L. monocytogenes</i> with use of HPP.
2012	(13)	Beef pâté (cooked, ground, and mixed with spices, at 9.11%, 25%, or 35% fat)	<i>E. coli</i> and <i>Listeria monocytogenes</i> (inoculated)	No	220 or 308 MPa at 21 or 43°C for 5 or 15 min	(different pHs: 5.65, 5.95, and 6.40)	None	(1) Heat increase from 21 to 43°C did not enhance the antimicrobial effect of pressurization at any of the pH levels. (2) Increasing pressure from 220 to 308 MPa significantly enhanced the antimicrobial effect of pressurization, especially on <i>E. coli</i> rather than <i>L. monocytogenes</i> , at all pH levels. (3) The increase in additional fat ratio from 9.11% to 25% or 35% (of the total meat weight) directly reduced the antimicrobial effect of all different pressure applications.

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2012	(31)	Chicken filets	<i>E.coli</i> O157:H7, <i>Pseudomonas fluorescens</i> (inoculated)	No	200–500 MPa for 10 min at 10°C	Bovine lactoferrin, amidated or pepsin-digested lactoferrin, and activated lactoferrin	None	Lactoferrin (LF) and its derivatives, by themselves, had limited potential for bacterial control in chicken filets. High hydrostatic pressure reduced counts of <i>E. coli</i> O157:H7 and <i>P. fluorescens</i> in chicken filets. The combination of high pressure treatments with LF and its derivatives showed a synergistic effect.
2012	(15)	Dry-cured hams at different water and fat contents	<i>Listeria monocytogenes</i> (inoculated)	No	600 MPa for 5 min	Nisin, applied directly or through active packaging	60 days of storage at 8°C	The immediate inactivation of <i>L. monocytogenes</i> by HPP ranged from 1.82 to 3.85 log units, depending on the type of dry-cured ham. The lower the water activity, the less was the inactivation induced by HPP, both immediately and during storage. The reduction of <i>L. monocytogenes</i> immediately after HPP and during storage was more evident in batches with nisin applied directly to the surface of the product. The pathogen was not detected in some samples from day 5 of storage in the product with higher water activity. The results of the present study indicated that HPP, as post-processing listericidal treatment, is more effective (both immediately and long term) than the use of nisin as an antimicrobial measure. However, both hurdles combined (i.e. biopreservation and HPP) provided a wider margin of safety in the control of <i>L. monocytogenes</i> during the storage of RTE cured meat products.
2012	(35)	Fresh chicken breast fillets stored under MAP (30% CO <sub>2</sub> , 70% N <sub>2</sub> )	Total viable counts, lactic acid bacteria, <i>Pseudomonas</i> spp., <i>B. thermosphacta</i> , coliforms, and <i>E. coli</i>	No	300 MPa	Commercial liquid antimicrobial edible coating of lactic and acetic acid, sodium diacetate, pectin, and water	35 days at 4°C under MAP	The coating-HPP-MAP combination was the most efficient in extending the durability of chicken breast fillets, which maintained their sensory and microbiological quality for up to 28 days. At the time of rejection, total counts were 6.3 ± 0.7 log CFU/g, with LAB being dominant (100%). For coating-MAP and HPP-MAP fillets, the storage life was estimated to be two weeks while that of the untreated fillets was estimated to be one week.
2012	(20)	Ground pork	<i>E. coli</i> and <i>Listeria monocytogenes</i> (inoculated)	No	300–600 MPa	Ethanol extract of garlic, leeks, onions, and ginger powder	Not stated in abstract	Addition of extracts increased the overall efficiency of HP inactivation of pathogens. Inoculated microorganisms showed 7–8 log reductions by 600 MPa, except for <i>L. monocytogenes</i> treated with garlic (5.7 log reductions). The <i>E. coli</i> reduction in ground pork mixed with ethanol extracted garlic showed the highest efficiency (1.86) compared to leeks (1.25–1.31), onions (1.17–1.44), and ginger (1.50–1.82) when treated at pressure of 450 MPa.

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2012	(34)	Milk-based beverage, with and without cocoa	<i>Bacillus cereus</i>	No	100–300 MPa for 1–20 min	None, but cocoa did have an effect	10°C for 15 days	The presence of cocoa as well as HPP treatment were most important factors for controlling <i>B. cereus</i> risk exposure in this study.
2012	(10)	Raw pork meat	Four endogenous flora	No	350 MPa	Salt or sodium nitrite	12 days at varying storage temperatures: 2 days at 4 °C, 4 h at 20 °C, and 8 days at 8 °C	High pressure and salt were particularly efficient at delaying lactic acid bacteria. Synergy between the two hurdles was observed from 1.5% salt at 350 MPa.
2012	(33)	Rice pudding	<i>Staphylococcus aureus</i>	No	500–600 MPa for 5–10 min	Nisin, enterocin AS-48, cinnamon oil, and clove oil	1 week at refrigeration temperature	The combined treatment of enterocin AS-48 and HPP caused a non-significant reduction of 0.4-0.6 log cycles compared to HPP alone. Additional reductions of 0.87, 1.3 and 1.8 log cycles were recorded for the combined HPP treatments with nisin, cinnamon oil and clove oil, respectively. During refrigeration storage for one week, viable counts in puddings from combined treatments were significantly lower compared to the single HPP treatments. These results suggest the time and intensity of HPP treatments required for inactivation of <i>S. aureus</i> in puddings can be reduced when HPP is applied in combination with selected natural antimicrobials.
2012	(12)	Salt-reduced restructured hams	Aerobic mesophilic total counts, LAB, Enterobacteriaceae, <i>Listeria monocytogenes</i> , <i>Staphylococcus aureus</i> , and <i>Salmonella</i> (endogenous)	No	600 MPa for 6 min	Potassium lactate	45–108 days at 5°C	Potassium lactate reduced $a_w$ and microbiota of processed hams, mainly in the inner parts, and had no effect on color or sensory parameters.
2010	(36)	Sliced cured meats	<i>Listeria monocytogenes</i>	No	500 MPa for 5 min		6°C for up to 210 days	HPP was not as effective for the tested dry-cured meat products as it was for products with higher $a_w$ values, probably because low $a_w$ values protect cells from pressure.

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2010	(7)	Vienna sausages	<i>Listeria monocytogenes</i>	No	350 MPa for 1–20 min	<i>Lactobacillus casei</i> cell extract	None	Synergistic antimicrobial activity between HPP and the <i>L. casei</i> cell extract was observed in the meat product inoculated with <i>L. monocytogenes</i> .
2009	(9)	Blood sausage	Spoilage bacteria	No	600 MPa for 10 min	Organic acids (3% mixture of potassium/sodium L-lactate)	None	Only a mild synergistic effect was seen when both HPP and lactate salts were used. HPP treatment was more effective than the lactate salts alone, although not enough to inhibit growth of all spoilage organisms.
2009	(2)	Poultry	<i>C. perfringens</i>	Yes	100–586 MPa at 23 to 80°C for 7–10 min	(None, but used L-asparagine and KCl to promote spore germination, and combined this with heat and pressure)	None	The most efficient strategy to inactivate <i>C. perfringens</i> spores in poultry meat containing 50 mM AK included the following steps: (i) a primary heat treatment (80°C, 10 min) to pasteurize and denature the meat proteins and to activate <i>C. perfringens</i> spores for germination; (ii) cooling of the product to 55°C in about 20 min and further incubation at 55°C for about 15 min for spore germination; and (iii) inactivation of germinated spores by pressure assisted thermal processing (586 MPa at 73°C for 10 min).
2008	(27)	Cooked ham	<i>Listeria monocytogenes</i>	No	400 MPa for 10 min	Enterocins and lactate-diacetate	3 months at 1°C or 6°C.	The combination of low storage temperature (1°C), high pressure processing (HPP) and addition of lactate–diacetate reduced the levels of <i>L. monocytogenes</i> during storage by 2.7 log CFU/g. The most effective treatment was the combination of HPP, enterocins and refrigeration at 1°C, which reduced the population of the pathogen to final counts of 4 MPN/g after three months of storage, even after the cold chain break (Temperature abuse, which consisted of maintaining the samples for 24 h at room temperature, was performed at days 40 and 60 of storage for samples stored at 6°C and 1°C, respectively).
2008	(18)	Cooked ham	<i>Listeria monocytogenes</i> , <i>Salmonella</i> spp., and <i>Staphylococcus aureus</i>	No	600 MPa	Nisin and potassium lactate	3 months at 1°C or 6°C.	HPP reduced the levels of <i>Salmonella</i> and <i>L. monocytogenes</i> to levels below 10 CFU/g. These levels continued until the end of storage at both 1 and 6°C. HPP produced a reduction of less than 1 log CFU/g to <i>S. aureus</i> . The combination of HPP, nisin and refrigeration at 6°C was necessary to decrease the levels of <i>S. aureus</i> by 2.4 log CFU/g after 3 months of storage.

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2007	(17)	Cooked ham (sliced)	<i>Listeria monocytogenes</i>	No	400 MPa	Enterocin A and B, sakacin K, nisin, 1.8% potassium lactate, and a combination of nisin and lactate	At least 3 months at 6°C	In non-pressurized samples, nisin plus lactate-containing interleavers were the most effective, inhibiting <i>L. monocytogenes</i> growth for 30 days at 6°C, with counts that were 1.9 log CFU/g lower than in the control after 3 months. In the other antimicrobial-containing interleavers, <i>L. monocytogenes</i> did not exhibit a lag phase and progressively grew to levels of about 8 log CFU/g. HPP of actively packaged ham slices reduced <i>Listeria</i> populations about 4 log CFU/g in all batches containing bacteriocins (i.e., nisin, sakacin, and enterocins). At the end of storage, <i>L. monocytogenes</i> levels in the bacteriocin-containing batches were the lowest, with counts below 1.51 log CFU/g. In contrast, HPP moderately reduced <i>L. monocytogenes</i> counts in the control and lactate batches, with populations gradually increasing to about 6.5 log CFU/g at the end of storage.
2005	(8)	“Commercially sterile” sausage	Barotolerant <i>Listeria monocytogenes</i>	No	600 MPa for 5 min (28°C)	Nisin (100–200 ppm) and/or tert-butylhydroquinone (TBHQ) (100–300 ppm)	None	Most samples treated with nisin, TBHQ, or their combination were positive for <i>L. monocytogenes</i> . HPP alone resulted in a modest decrease in the number of positive samples. <i>L. monocytogenes</i> was not detected in any of the inoculated commercial sausage samples after treatment with HPP-TBHQ or HPP-TBHQ-nisin combinations. These results suggest addition of TBHQ or TBHQ plus nisin to sausage followed by in-package pressurization is a promising method for producing <i>Listeria</i> -free, ready-to-eat products.
2003	(21)	Roast beef	<i>C. perfringens</i>	Yes	345 MPa for 5 min at 60°C	Nisin and pediocin with lysozyme or EDTA	4 or 12°C for 84 days or at 25°C for 7 days	The roast beef samples (cooked to 71.1°C were subjected to HPP at 345 MPa for 5 min at 60°C and stored at 4 or 12°C for 84 days or at 25°C for 7 days. The HP treatment of roast beef samples inoculated with a mixture of clostridial spores could be stored for 42 days at 4°C. The HP in combination with either BPx (bacteriocins nisin and pediocin with lysozyme), or BPy (bacteriocins nisin and pediocin with EDTA), extended the shelf-life of roast beef up to 7 days at 25°C.



## References

1. Abriouel, H., Benomar, N., Galvez, A., & Pulido, R. P. (2014). Preservation of Manzanilla Alorena cracked green table olives by high hydrostatic pressure treatments singly or in combination with natural antimicrobials. *Food Sci Technol-LEB*, 56(2), 427-431. doi: 10.1016/j.lwt.2013.09.012
2. Akhtar, S., Paredes-Sabja, D., Torres, J. A., & Sarker, M. R. (2009). Strategy to inactivate *Clostridium perfringens* spores in meat products. *Food Microbiol*, 26(3), 272-277. doi: 10.1016/j.fm.2008.12.011
3. Alba, M. d., Bravo, D., & Medina, M. (2013). Inactivation of *Escherichia coli* O157:H7 in dry-cured ham by high-pressure treatments combined with biopreservatives. *Food Control*, 31(2), 508-513.
4. Barba, F. J., Criado, M., Belda-Galbis, C. M., Esteve, M. J., & Rodrigo, D. (2014). *Stevia rebaudiana* Bertoni as a natural antioxidant/antimicrobial for high pressure processed fruit extract: Processing parameter optimization. *Food Chem*, 148, 261-267. doi: 10.1016/j.foodchem.2013.10.048
5. Bravo, D., de Alba, M., & Medina, M. (2014). Combined treatments of high-pressure with the lactoperoxidase system or lactoferrin on the inactivation of *Listeria monocytogenes*, *Salmonella* Enteritidis and *Escherichia coli* O157:H7 in beef carpaccio. *Food Microbiol*, 41, 27-32. doi: 10.1016/j.fm.2014.01.010
6. Bulut, S. (2014). The Effects of High-Pressure Processing at Low and Subzero Temperatures on Inactivation of Microorganisms in Frozen and Unfrozen Beef Mince Inoculated with *Escherichia coli* Strain ATCC 25922. *Food Bioprocess Tech*, 7(10), 3033-3044. doi: 10.1007/s11947-014-1339-1
7. Chung, H. J., & Yousef, A. E. (2010). Synergistic effect of high pressure processing and *Lactobacillus casei* antimicrobial activity against pressure resistant *Listeria monocytogenes*. *New Biotechnol*, 27(4), 403-408.
8. Chung, Y. K., Vurma, M., Turek, E. J., Chism, G. W., & Yousef, A. E. (2005). Inactivation of barotolerant *Listeria monocytogenes* in sausage by combination of high-pressure processing and food-grade additives. *J Food Protect*, 68(4), 744-750.
9. Diez, A. M., Santos, E. M., Jaime, I., & Rovira, J. (2009). Effectiveness of combined preservation methods to extend the shelf life of *Morcilla de Burgos*. *Meat Sci*, 81(1), 171-177. doi: 10.1016/j.meatsci.2008.07.015
10. Duranton, F., Guillou, S., Simonin, H., Cheret, R., & de Lamballerie, M. (2012). Combined use of high pressure and salt or sodium nitrite to control the growth of endogenous microflora in raw pork meat. *Innov Food Sci Emerg*, 16, 373-380. doi: 10.1016/j.ifset.2012.08.004
11. Espina, L., Garcia-Gonzalo, D., Laglaoui, A., Mackey, B. M., & Pagan, R. (2013). Synergistic combinations of high hydrostatic pressure and essential oils or their constituents and their use in preservation of fruit juices. *Int J Food Microbiol*, 161(1), 23-30. doi: 10.1016/j.ijfoodmicro.2012.11.015
12. Fulladosa, E., Sala, X., Gou, P., Garriga, M., & Arnau, J. (2012). K-lactate and high pressure effects on the safety and quality of restructured hams. *Meat Sci*, 91(1), 56-61. doi: 10.1016/j.meatsci.2011.12.006
13. Gogus, U. (2012). Effects of Pressurization on Some Contamination Flora in Beef Pate. *J Food Sci*, 77(10), M550-M559. doi: 10.1111/j.1750-3841.2012.02893.x
14. Gunlu, A., Sipahioglu, S., & Alpas, H. (2014). The effect of chitosan-based edible film and high hydrostatic pressure process on the microbiological and chemical quality of rainbow trout (*Oncorhynchus mykiss* Walbaum) fillets during cold storage (4 +/- 1 degrees C). *High Pressure Res*, 34(1), 110-121. doi: 10.1080/08957959.2013.836643
15. Hereu, A., Bover-Cid, S., Garriga, M., & Aymerich, T. (2012). High hydrostatic pressure and biopreservation of dry-cured ham to meet the Food Safety Objectives for *Listeria monocytogenes*. *Int J Food Microbiol*, 154(3), 107-112. doi: 10.1016/j.ijfoodmicro.2011.02.027
16. Hereu, A., Dalgaard, P., Garriga, M., Aymerich, T., & Bover-Cid, S. (2014). Analysing and modelling the growth behaviour of *Listeria monocytogenes* on RTE cooked meat products after a high pressure treatment at 400 MPa. *Int J Food Microbiol*, 186, 84-94. doi: 10.1016/j.ijfoodmicro.2014.06.020
17. Jofre, A., Garriga, M., & Aymerich, T. (2007). Inhibition of *Listeria monocytogenes* in cooked ham through active packaging with natural antimicrobials and high-pressure processing. *J Food Protect*, 70(11), 2498-2502.
18. Jofre, A., Garriga, M., & Aymerich, T. (2008). Inhibition of *Salmonella* sp *Listeria monocytogenes* and *Staphylococcus aureus* in cooked ham by combining antimicrobials, high hydrostatic

- pressure and refrigeration. *Meat Sci*, 78(1-2), 53-59. doi: 10.1016/j.meatsci.2007.06.015
19. Juhee, A., & Bala, V. M. B. (2014). Inactivation kinetics and injury recovery of *Bacillus amyloliquefaciens* spores in low-acid foods during pressure-assisted thermal processing. *Food Sci Biotechnol*, 23(6), 1851-1857.
  20. Jung, S., Yun, H., Kim, H. J., Ham, J. S., Kim, I. S., Lee, M., & Jo, C. (2012). Inactivation Efficiency of *Escherichia coli* and *Listeria monocytogenes* in Ground Pork by Combination of Natural Food Ingredients and High Pressure Processing. *Korean J Food Sci of Anim Resources*, 32(1), 1-5. doi: 10.5851/kosfa.2012.32.1.1
  21. Kalchayanand, N., Dunne, C. P., Sikes, A., & Ray, B. (2003). Inactivation of bacterial spores by combined action of hydrostatic pressure and bacteriocins in roast beef. *J Food Safety*, 23(4), 219-231. doi: 10.1111/j.1745-4565.2003.tb00366.x
  22. Lavieri, N. A., Sebranek, J. G., Brehm-Stecher, B. F., Cordray, J. C., Dickson, J. S., Horsch, A. M., . . . Mendonca, A. F. (2014a). Investigating the Control of *Listeria monocytogenes* on a Ready-to-Eat Ham Product Using Natural Antimicrobial Ingredients and Postlethality Interventions. *Foodborne Pathog Dis*, 11(6), 462-467. doi: 10.1089/fpd.2013.1702
  23. Lavieri, N. A., Sebranek, J. G., Brehm-Stecher, B. F., Cordray, J. C., Dickson, J. S., Horsch, A. M., . . . Mendonca, A. F. (2014b). Investigating the control of *Listeria monocytogenes* on alternatively-cured frankfurters using natural antimicrobial ingredients or post-lethality interventions. *Meat Sci*, 97(4), 568-574. doi: 10.1016/j.meatsci.2014.03.004
  24. Lerasle, M., Guillou, S., Simonin, H., Anthoine, V., Cheret, R., Federighi, M., & Membre, J. M. (2014). Assessment of *Salmonella* and *Listeria monocytogenes* level in ready-to-cook poultry meat: Effect of various high pressure treatments and potassium lactate concentrations. *Int J Food Microbiol*, 186, 74-83. doi: 10.1016/j.ijfoodmicro.2014.06.019
  25. Linton, M., Connolly, M., Houston, L., & Patterson, M. F. (2014). The control of *Clostridium botulinum* during extended storage of pressure-treated, cooked chicken. *Food Control*, 37, 104-108. doi: 10.1016/j.foodcont.2013.09.042
  26. Marcos, B., Aymerich, T., Garriga, M., & Arnau, J. (2013). Active packaging containing nisin and high pressure processing as post-processing listericidal treatments for convenience fermented sausages. *Food Control*, 30(1), 325-330. doi: 10.1016/j.foodcont.2012.07.019
  27. Marcos, B., Jofre, A., Aymerich, T., Monfort, J. M., & Garriga, M. (2008). Combined effect of natural antimicrobials and high pressure processing to prevent *Listeria monocytogenes* growth after a cold chain break during storage of cooked ham. *Food Control*, 19(1), 76-81. doi: 10.1016/j.foodcont.2007.02.005
  28. Montiel, R., Martin-Cabrejas, I., Gaya, P., & Medina, M. (2014). Reuterin and High Hydrostatic Pressure Treatments on the Inactivation of *Listeria monocytogenes* and Effect on the Characteristics of Cold-Smoked Salmon. *Food and Bioprocess Tech*, 7(8), 2319-2329. doi: 10.1007/s11947-014-1287-9
  29. Myers, K., Montoya, D., Cannon, J., Dickson, J., & Sebranek, J. (2013). The effect of high hydrostatic pressure, sodium nitrite and salt concentration on the growth of *Listeria monocytogenes* on RTE ham and turkey. *Meat Sci*, 93(2), 263-268. doi: 10.1016/j.meatsci.2012.09.007
  30. Nunez-Flores, R., Castro, A. X., Lopez-Caballero, M. E., Montero, P., & Gomez-Guillen, M. C. (2013). Functional stability of gelatin-lignosulphonate films and their feasibility to preserve sardine fillets during chilled storage in combination with high pressure treatment. *Innov Food Sci Emerg Tech*, 19, 95-103. doi: 10.1016/j.ifset.2013.04.006
  31. Olmo, A. d., Calzada, J., & Nunez, M. (2012). Effect of lactoferrin and its derivatives, high hydrostatic pressure, and their combinations, on *Escherichia coli* O157:H7 and *Pseudomonas fluorescens* in chicken filets. *Innov Food Sci Emerg Technol*, 13, 51-56.
  32. Patrignani, F., Tabanelli, G., Siroli, L., Gardini, F., & Lanciotti, R. (2013). Combined effects of high pressure homogenization treatment and citral on microbiological quality of apricot juice. *Int J Food Microbiol*, 160(3), 273-281. doi: 10.1016/j.ijfoodmicro.2012.10.021
  33. Perez Pulido, R., Toledo del Arbol, J., Grande Burgos, M. J., & Galvez, A. (2012). Bactericidal effects of high hydrostatic pressure treatment singly or in combination with natural antimicrobials on *Staphylococcus aureus* in rice pudding. *Food Control*, 28(1), 19-24. doi: 10.1016/j.foodcont.2012.04.045
  34. Pina-Perez, M. C., Silva-Angulo, A. B., Rodrigo, D., & Martinez-Lopez, A. (2012). A preliminary exposure assessment model for *Bacillus cereus* cells in a milk based beverage: Evaluating High Pressure Processing and antimicrobial interventions. *Food Control*, 26(2), 610-613.



35. Rodriguez-Calleja, J. M., Cruz-Romero, M. C., O'Sullivan, M. G., Garcia-Lopez, M. L., & Kerry, J. P. (2012). High-pressure-based hurdle strategy to extend the shelf-life of fresh chicken breast fillets. *Food Control*, 25(2), 516-524. doi: 10.1016/j.foodcont.2011.11.014
36. Rubio, B., Martinez, B., Garcia-Cachan, M. D., Rovira, J., & Jaime, I. (2010). The effects of HHP treatment on *Listeria monocytogenes* inoculated in dry-cured meat products. *Fleischwirtschaft*, 90(4), 188-192.
37. Rubio, R., Bover-Cid, S., Martin, B., Garriga, M., & Aymerich, T. (2013). Assessment of safe enterococci as bioprotective cultures in low-acid fermented sausages combined with high hydrostatic pressure. *Food Microbiol*, 33(2), 158-165. doi: 10.1016/j.fm.2012.09.012
38. Tola, Y. B., & Ramaswamy, H. S. (2014). Combined effects of high pressure, moderate heat and pH on the inactivation kinetics of *Bacillus licheniformis* spores in carrot juice. *Food Res Int*, 62, 50-58. doi: 10.1016/j.foodres.2014.02.006