

*Listado de publicaciones de
la Red Healthy Meat
(CITED 119RT0568):*

[Período 2021-2022]

Durante la anualidad 2021 la Red *Healthy Meat* demostró una especial implicación en tareas de difusión y transferencia de resultados con la **publicación en revistas de alto impacto indexadas (SCI)**. En el área de *Food Science and Technology* se publicaron 28 artículos en el año **2021**, de las que 25 trabajos están en el primer cuartil y 3 en el segundo cuartil:

- Teixeira, A., Domínguez, R., Ferreira, I., Pereira, E., Estevinho, L., Rodrigues, S., & Lorenzo, J.M. (2021). Effect of NaCl Replacement by other Salts on the Quality of Bísaro Pork Sausages (PGI Chouriça de Vinhais). *Foods*, 10(5), 961.
- Pedro, D., Saldaña, E., Lorenzo, J.M., Pateiro, M., Domínguez, R., Dos Santos, B. A., ... & Campagnol, P.C.B. (2021). Low-sodium dry-cured rabbit leg: A novel meat product with healthier properties. *Meat Science*, 173, 108372.
- Barros, J.C., Munekata, P.E.S, de Carvalho, F.A.L., Domínguez, R., Trindade, M.A., Pateiro, M., & Lorenzo, J.M. (2021). Healthy beef burgers: Effect of animal fat replacement by algal and wheat germ oil emulsions. *Meat Science*, 173, 108396.
- Pateiro, M., Gómez-Salazar, J.A., Jaime-Patlán, M., Sosa Morales, M.E., & Lorenzo, J.M. (2021). Plant extracts obtained with green solvents as natural antioxidants in fresh meat products. *Antioxidants*, 10(2), 181.
- Pateiro, M., Munekata, P.E.S, Sant'Ana, A.S., Domínguez, R., Rodríguez-Lázaro, D., & Lorenzo, J.M. (2021). Application of essential oils as antimicrobial agents against spoilage and pathogenic microorganisms in meat products. *International Journal of Food Microbiology*, 337, 108966.
- Zamuz, S., Munekata, P.E.S., Dzuovor, C.K., Zhang, W., Sant'Ana, A.S., & Lorenzo, J.M. (2021). The role of phenolic compounds against *Listeria monocytogenes* in food. A review. *Trends in Food Science & Technology*, 110, 385-392.
- Vargas-Ramella, M., Lorenzo, J.M., Domínguez, R., Pateiro, M., Munekata, P.E.S., Campagnol, P.C.B., & Franco, D. (2021). Effect of NaCl Partial Replacement by Chloride Salts on Physicochemical Characteristics, Volatile Compounds and Sensorial Properties of Dry-Cured Deer Cecina. *Foods*, 10(3), 669.
- Carvalho, L.T., Giampietro-Ganeco, A., de Mello, J.L.M., Ferrari, F.B., de Souza, R. A., de Souza, P.A., ... & Lorenzo, J.M. (2021). Quality and stability of cooked sausages made from turkey meat affected by the white striping myopathy. *Journal of Food Processing and Preservation*, e15555.
- Gonçalves, L.A., Lorenzo, J.M., & Trindade, M.A. (2021). Fruit and Agro-Industrial Waste Extracts as Potential Antimicrobials in Meat Products: A Brief Review. *Foods*, 10(7), 1469.
- Munekata, P.E.S., Pérez-Álvarez, J.A., Pateiro, M., Viuda-Matos, M., Fernández-López, J., & Lorenzo, J.M. (2021). Satiety from healthier and functional foods. *Trends in Food Science & Technology*, 113, 397-410.
- Pedro, D., Lorenzo, J.M., Saldaña, E., Heck, R.T., Dos Santos, B.A., Cichoski, A.J., & Campagnol, P.C.B. (2021). Sodium reformulation and its impact on oxidative stability and sensory quality of dry-cured rabbit legs. *Meat Science*, 177, 108485.
- Munekata, P.E.S., Pateiro, M., Domínguez, R., Pollonio, M.A., Sepúlveda, N., Andres, S.C., ... & Lorenzo, J.M. (2021). Beta vulgaris as a Natural Nitrate Source for Meat Products: A Review. *Foods*, 10(9), 2094.
- Velázquez, L., Quiñones, J., Díaz, R., Pateiro, M., Lorenzo, J.M., & Sepúlveda, N. (2021). Natural Antioxidants from Endemic Leaves in the Elaboration of Processed Meat Products: Current Status. *Antioxidants*, 10(9), 1396.
- Vargas-Ramella, M., Lorenzo, J.M., Zamuz, S., Valdés, M.E., Moreno, D., Balcázar, M.C.G., ... & Franco, D. (2021). The Antioxidant effect of Colombian berry (*Vaccinium meridionale* Sw.) extracts to prevent lipid oxidation during pork patties shelf-life. *Antioxidants*, 10(8), 1290.
- Merlo, T.C., Lorenzo, J.M., Saldaña, E., Patinho, I., Oliveira, A.C., Menegali, B. S., ... & Contreras-Castillo, C.J. (2021). Relationship between volatile organic compounds, free amino acids, and sensory profile of smoked bacon. *Meat Science*, 108596.

- Bravo, S., Inostroza, K., Lorenzo, J.M., Sepúlveda, G., Domínguez, R., Scheuermann, E., ... & Sepúlveda, N. (2021). Influence of Murta (*Ugni molinae* Turcz) Powder on the Frankfurters Quality. *Applied Sciences*, 11(18), 8610.
- Pérez-Montes, A., Rangel-Vargas, E., Lorenzo, J.M., Romero, L., & Santos, E.M. (2021). Edible mushrooms as a novel trend in the development of healthier meat products. *Current Opinion in Food Science*, 37, 118-124.
- Munekata, P.E.S., Pateiro, M., Domínguez, R., Santos, E.M., & Lorenzo, J.M. (2021). Cruciferous vegetables as sources of nitrate in meat products. *Current Opinion in Food Science*, 38, 1-7.
- Gómez-Salazar, J.A., Galván-Navarro, A., Lorenzo, J.M., & Sosa-Morales, M.E. (2021). Ultrasound effect on salt reduction in meat products: a review. *Current Opinion in Food Science*, 38, 71-78.
- Pinton, M.B., dos Santos, B.A., Lorenzo, J.M., Cichoski, A.J., Boeira, C.P., & Campagnol, P.C.B. (2021). Green technologies as a strategy to reduce NaCl and phosphate in meat products: An overview. *Current Opinion in Food Science*, 40, 1-5.
- Heck, R.T., Lorenzo, J.M., Dos Santos, B.A., Cichoski, A.J., de Menezes, C.R., & Campagnol, P.C.B. (2021). Microencapsulation of healthier oils: an efficient strategy to improve the lipid profile of meat products. *Current Opinion in Food Science*, 40, 6-12.
- Gullón, P., Astray, G., Gullón, B., Franco, D., Campagnol, P.C.B., & Lorenzo, J.M. (2021). Inclusion of seaweeds as healthy approach to formulate new low-salt meat products. *Current Opinion in Food Science*, 40, 20-25.
- López-Pedrouso, M., Lorenzo, J.M., Gullón, B., Campagnol, P.C.B., & Franco, D. (2021). Novel strategy for developing healthy meat products replacing saturated fat with oleogels. *Current Opinion in Food Science*, 40, 40-45.
- Nieto, G., & Lorenzo, J. M. (2021). Use of olive oil as fat replacer in meat emulsions. *Current Opinion in Food Science*, 40, 179-186.
- Ozaki, M.M., Dos Santos, M., Ribeiro, W.O., de Azambuja Ferreira, N.C., Picone, C.S.F., Domínguez, R., ... & Pollonio, M.A.R. (2021). Radish powder and oregano essential oil as nitrite substitutes in fermented cooked sausages. *Food Research International*, 140, 109855.
- Cerón-Guevara, M.I., Santos, E.M., Lorenzo, J.M., Pateiro, M., Bermúdez-Piedra, R., Rodríguez, J.A., ... & Rangel-Vargas, E. (2021). Partial replacement of fat and salt in liver pâté by addition of *Agaricus bisporus* and *Pleurotus ostreatus* flour. *International Journal of Food Science & Technology*, 56(12), 6171-6181.
- Rangel-Vargas, E., Rodríguez, J. A., Domínguez, R., Lorenzo, J.M., Sosa, M.E., Andrés, S.C., ... & Santos, E.M. (2021). Edible mushrooms as a natural source of food ingredient/additive replacer. *Foods*, 10(11), 2687.
- Nieto, G., Fernández-López, J., Pérez-Álvarez, J.A., Peñalver, R., Ros, G., & Viuda-Martos, M. (2021). Valorization of citrus co-products: Recovery of bioactive compounds and application in meat and meat products. *Plants*, 10(6), 1069.

En el año 2022, se publicaron 18 artículos en el área de *Food Science and Technology*, de los que 15 trabajos están en el primer cuartil y 3 en el segundo cuartil:

- Domínguez, R., Lorenzo, J.M., Pateiro, M., Munekata, P.E.S., dos Santos, B.A., Basso Pinton, M., Cichoski, A.J., & Campagnol, P.C.B. (2022). Main animal fat replacers for the manufacture of healthy processed meat products. *Critical Reviews in Food Science and Nutrition*, 1-20.
- Nehring, P., Lorenzo, J.M., Santos, S.P., Wagner, R., de Menezes, C.R., Dos Santos, B.A., Barin, J.S., Campagnol, P.C.B., & Cichoski, A. J. (2022). Effect of ultrasound application on the growth of *S. xylosum* inoculated in by-products from the poultry industry. *Current Research in Food Science*, 5, 345-350.

- Pinton, M.B., Lorenzo, J.M., Seibt, A.C.M.D., Dos Santos, B.A., da Rosa, J.L., Correa, L.P., Cichoski, A.J., & Campagnol, P.C.B. (2022). Effect of high-power ultrasound and bamboo fiber on the technological and oxidative properties of phosphate-free meat emulsions. *Meat Science*, 193, 108931.
- da Rosa, J.L., Rios-Mera, J.D., Castillo, C.J.C., Lorenzo, J.M., Pinton, M.B., dos Santos, B.A., Correa, L.P., Henn, A.S., Cichoski, A.J., Flores, E.M.M., & Campagnol, P. C. B. (2023). High-power ultrasound, micronized salt, and low KCl level: An effective strategy to reduce the NaCl content of Bologna-type sausages by 50%. *Meat Science*, 195, 109012.
- Vargas-Ramella, M., Lorenzo, J. M., Zamuz, S., Montes, L., Santos, E.M., Moreira, R., & Franco, D. (2022). Influence of pork backfat replacement by microencapsulated fish oil on physicochemical, rheological, nutritional, and sensory features of pork liver pâtés. *LWT*, 163, 113522.
- Vidal, A.R., Cansian, R.L., Mello, R.D.O., Demiate, I.M., Kempka, A.P., Dornelles, R.C.P., Lorenzo, J.M. & Campagnol, P.C.B. (2022). Production of Collagens and Protein Hydrolysates with Antimicrobial and Antioxidant Activity from Sheep Slaughter By-Products. *Antioxidants*, 11(6), 1173.
- Velázquez, L., Quiñones, J., Inostroza, K., Sepúlveda, G., Díaz, R., Scheuermann, E., Domínguez, R., Lorenzo, J.M., Velásquez, C. & Sepúlveda, N. (2022). Maqui (*Aristotelia Chilensis* (Mol.) Stuntz): A natural antioxidant to improve quality of meat patties. *Antioxidants*, 11(7), 1405.
- Foggiaro, D., Domínguez, R., Pateiro, M., Cittadini, A., Munekata, P.E.S., Campagnol, P.C.B., Fraqueza, M.J., De Palo, P., & Lorenzo, J.M. (2022). Use of healthy emulsion hydrogels to improve the quality of pork burgers. *Foods*, 11(4), 596.
- Peñalver, R., Martínez-Zamora, L., Lorenzo, J. M., Ros, G., & Nieto, G. (2022). Nutritional and Antioxidant Properties of *Moringa oleifera* Leaves in Functional Foods. *Foods*, 11(8), 1107.
- Sirini, N., Munekata, P.E.S., Lorenzo, J.M., Stegmayer, M.A., Pateiro, M., Pérez-Álvarez, J.A., Sepúlveda, N., Sosa-Morales, M.E., Teixeira, A., Fernández-López, J., Frizzo, L., & Rosmini, M. (2022). Development of healthier and functional dry fermented Sausages: Present and future. *Foods*, 11(8), 1128.
- Leite, A., Domínguez, R., Vasconcelos, L., Ferreira, I., Pereira, E., Pinheiro, V., Outor-Monteiro, D., Rodrigues, S., Lorenzo, J.M., Santos, E.M., Andrés, S.C., Campagnol, P.C.B., & Teixeira, A. (2022). Can the Introduction of Different Olive Cakes Affect the Carcass, Meat and Fat Quality of Bísaro Pork? *Foods*, 11(11), 1650.
- Santiesteban-López, N.A., Gómez-Salazar, J.A., Santos, E.M., Campagnol, P.C.B., Teixeira, A., Lorenzo, J.M., Sosa-Morales, M.E., & Domínguez, R. (2022). Natural Antimicrobials: A Clean Label Strategy to Improve the Shelf Life and Safety of Reformulated Meat Products. *Foods*, 11(17), 2613.
- Leite, A., Vasconcelos, L., Ferreira, I., Sarmiento-García, A., Domínguez, R., Santos, E.M., Campagnol, P.C.B., Rodrigues, S., Lorenzo, J.M., & Teixeira, A. (2022). Chemical, Physicochemical and Sensorial Characterization of Nitrite-Free Dry-Cured Bísaro Shoulders. *Foods*, 11(19), 3079.
- Munekata, P.E., Pateiro, M., Tomasevic, I., Domínguez, R., Barretto, A.C.S., Santos, E.M., & Lorenzo, J.M. (2022). Functional fermented meat products with probiotics—A review. *Journal of Applied Microbiology*, 133(1), 91-103.
- Santos, E.M., Sánchez-Ortega, I., Lorenzo, J.M., Domínguez, R., Munekata, P.E., Falfán-Cortés, R.N., Ibarra, I.S., & Rangel-Vargas, E. (2022). Use of Hibiscus sabdariffa calyxes in meat products. *Frontiers in Animal Science*, 3, 876042.
- Ferreira, I., Vasconcelos, L., Leite, A., Botella-Martínez, C., Pereira, E., Mateo, J., Kasaiyan, S., & Teixeira, A. (2022). Use of Olive and Sunflower Oil Hydrogel Emulsions as Pork Fat

Replacers in Goat Meat Burgers: Fat Reduction and Effects in Lipidic Quality. *Biomolecules*, 12(10), 1416.

- Argel, N.S., Lorenzo, G., Domínguez, R., Fraqueza, M.J., Fernández-López, J., Sosa, M.E., Campagnol, P.C.B., & Andrés, S. C. (2022). Hybrid Meat Products: Incorporation of White Bean Flour in Lean Pork Burgers. *Applied Sciences*, 12(15), 7571.
- López-Fernández, O., Domínguez, R., Santos, E. M., Pateiro, M., Munekata, P.E.S., Campagnol, P.C.B., & Lorenzo, J.M. (2022). Comparison Between HPLC-PAD and GC-MS Methods for the Quantification of Cholesterol in Meat. *Food Analytical Methods*, 15(4), 1118-1131.

En cuanto a la difusión a través de **libros y capítulos de libro**, en el **año 2021** se publicó el siguiente capítulo de libro:

- Descalzo, A.M., Pighin, D.G., Dhuique-Mayer, C., Lorenzo, J.M., & Grigioni, G.M. (2021). Dynamics and innovative technologies affecting diets: implications on global food and nutrition security. In: Galanakis, C.M. (Ed.), *Food Security and Nutrition*. Elsevier: Londres. pp. 257-276

En el **año 2022**, se editaron **cuatro libros cuya temática se encuadra con los objetivos de la Red HealtyMeat**:

- Lorenzo, J.M., Domínguez, R., Pateiro, M., Munekata, P.E.S. (Eds.) *Methods to Assess the Quality of Meat Products*. ISBN 978-1-0716-2001-4, Humana Press (Springer Nature)
 - Bermúdez, R., Echegaray, N., Fraqueza, M.J., Pateiro, M., Domínguez, R., Munekata, P.E., Lorenzo, J.M., Santos, E.M. Chemical Composition. Pp. 1-16
 - Teixeira, A., Domínguez, R., Rey, J.F., Aleu, G., Pateiro, M., Lorenzo, J.M. pH and Color. pp. 17-28
 - Echegaray, N., Rosmini, M., Pateiro, M., Domínguez, R., Munekata, P.E., Lorenzo, J.M., Santos, E.M., & Bermúdez, R. Texture Analysis. pp. 29-40
 - Domínguez, R., Purriños, L., Pateiro, M., Campagnol, P.C.B., Reyes, J.F., Munekata, P.E., Lorenzo, J.M. Fatty acids. pp. 41-52
 - López-Fernández, O., Domínguez, R., Pateiro, M., Andrés, S.C., Munekata, P.E., Purriños, L., Lorenzo, J.M., Trindade, M.A. Amino Acids (Free and Hydrolyzed). Pp. 53-64
 - López-Fernández, O., Domínguez, R., Ruiz-Capillas, C., Pateiro, M., Sosa-Moreales, M.E., Munekata, P.E., Sant'Ana, A.S., Lorenzo, J.M., Herrero, A.M. Cholesterol. pp. 65-72
 - Cutillas, L., López-Fernández, O., Domínguez, R., Pateiro, M., Pazos, A., Munekata, P.E., Purriños, L., Lorenzo, J.M., Silva-Barretto, A.C., Pérez-Álvarez, J.A. Mineral Profile. pp. 73-84
 - Bellucci, E.R.B., Bis-Souza, C.V., Lorenzo, J.M., Aleu, G., Teixeira, A., Domínguez, R., Silva-Barretto, A.C. Nitrate and Nitrite. pp. 85-96
 - Ruiz-Capillas, C., Triki, M., Domínguez, R., Lorenzo, J.M., Herrero, A.M. Biogenic Amines. pp. 97-106
 - Leães, Y.S.V., Lorenzo, J.M., Cichoski, A.J., Wagner, R., Santos, E.M., Reyes, J.F., Campagnol, P.C.B. Lipid Oxidation (Primary and Secondary products). pp. 115-132
 - López-Fernández, O., Domínguez, R., Cutillas, L., Munekata, P.E., Purriños, L., Lorenzo, J.M., Sepúlveda, N., Teixeira A., Pateiro, M. Volatile Organic Compound Profile. Pp. 133-140
 - Echegaray, N., Bermúdez, R., Nieto, G., Domínguez, R., Pateiro, M., Sepúlveda, N., Trindade, M.A., Lorenzo, J.M. Antioxidant Capacity. pp. 153-168
- Lorenzo, J.M., Domínguez, R., Pateiro, M., Munekata, P.E.S. (Eds.) *Production of Traditional Mediterranean Meat Products*. ISBN 978-1-0716-2102-8, Humana Press (Springer Nature)

- Nieto, G., Ros, G., Peñalver, R., Domínguez, R., Pérez-Álvarez, J.A., Teixeira, A., Lorenzo, J.M. Sobrasada. pp. 11-20
 - Pérez-Álvarez, J.A., Viuda-Martos, M., Nieto, G., Lorenzo, J.M., Fernández-López J. Salchichón. pp. 37-48
 - Domínguez, R., Pateiro, M., Campagnol, P.C.B., Rosmini, M., Munekata, P.E.S., Teixeira, A., Lorenzo, J.M. Androlla and Botillo. pp. 49-56
 - Domínguez, R., Pateiro, M., Teixeira, A., Pérez-Álvarez, J.A., Santos, E.M., Trindade, M.A., Munekata, P.E.S., Lorenzo, J.M. Dry-cured ham. pp. 57-66
 - Domínguez, R., Pateiro, M., Sosa-Morales, M.E., Reyes, J.F., Pazos, A., Nieto, G., Munekata, P.E.S., Lorenzo, J.M. Dry-cured loin. pp. 79-86
 - Teixeira, A., Domínguez, R., Reyes, J.F., Lorenzo, J.M., Trindade, M.A., Rodrigues, S. Alheira. pp. 153-160
 - Teixeira, A., Domínguez, R., Silva-Barretto, A.C., Rey, J.F., Lorenzo, J.M., Rodrigues, S. Chouriça de Carne. pp. 161-168
- Lorenzo, J. M., Pateiro, M., Saldaña, E., Munekata, P.E.S. (Eds.) Sensory Analysis for the Development of Meat products. Methodological Aspects and Practical Applications. ISBN 978-0-12-822832-6, Elsevier
 - Munekata, P.E.S., Pateiro, M., Domínguez, R., Sepúlveda, N., Santos, E.M., Lorenzo, J.M. Historical perspective of sensory analysis for the development of meat products: A contemporary challenge. pp. 1-27
 - Purriños, L., Pateiro, M., Rosmini, M., Domínguez, R., Teixeira, A., Munekata, P.E.S., Campagnol, P.C.B., Lorenzo, J.M. Descriptive sensory analysis as an analytical tool for the sensory characterization of meat products: Fundamentals, panel training, and descriptors of meat products. pp. 51-76
 - Pateiro, M., Purriños, L., Domínguez, R., Barretto, A.C.S., Munekata, P.E.S., Fraqueza, M.J., Pazos, A.A., Lorenzo, J.M. Descriptive sensory analysis of meat—The baseline for any sensory innovation for meat products: Case study. pp. 107-120
 - dos Santos, B.A., Cichoski, A.J., Lorenzo, J.M., Teixeira, A., Santos, E.M., Sepúlveda, N., Campagnol, P.C.B. Check-all-that-apply method to develop low-sodium sausages: A case study. pp. 121-135
- Lorenzo, J. M., Munekata, P.E., Pateiro, M., Barba, F.J., Domínguez, R. Food Lipids. Sources, Health Implications, and Future Trends. ISBN 978-0-12-823371-9, Elsevier, 2022
 - Nieto, G., Lorenzo, J.M. Plant source: Vegetable oils. pp. 69-85
 - Zamuz, S., Bohrer, B.M., Campagnol, P.C.B., Domínguez, R., Pateiro, M., Santos, E.M., Lorenzo, J.M. Lipid oxidation of animal fat. pp. 89-103
 - Agregán, R., Echegaray, N., Pateiro, M., Teixeira, A., Pérez-Álvarez, J.A., Domínguez, R., Aleu, G., Lorenzo, J.M. Lipid oxidation of marine oils. pp. 105-125
 - Echegaray, N., Pateiro, M., Nieto, G., Rosmini, M.R., Munekata, P.E.S., Sosa-Morales, M.E., Lorenzo, J.M. Lipid oxidation of vegetable oils. pp. 127-152
 - Heck, R.T., Dos Santos, B.A., Lorenzo, J.M., Ruiz-Capillas, C., Cichoski, A.J., De Menezes, C.R., Campagnol, P.C.B. Replacement of saturated fat by healthy oils to improve nutritional quality of meat products. pp. 461-487

Además, en esta anualidad también se publicó el siguiente capítulo de libro:

1. Campagnol, P.C.B., Lorenzo, J.M., dos Santos, B.A., Cichoski, A.J. Recent advances in the development of healthier meat products. En: Fidel Toldrá (Ed.), Advances in Food Nutrition and Research, Vol. 102. ISBN 978-0-323-99084-4, Elsevier, pp. 123-179