**Combination of ultrasound, micronized salt, and low KCl level as a strategy to produce low-sodium emulsified sausages**

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ABSTRACT

This study evaluated the combination of high-power ultrasound (HPU), micronized salt (MS), and low KCl levels as a strategy to produce low-sodium Bologna-type sausages. Samples with 50% NaCl reduction were made with regular salt (RS) or MS and 0.5% KCl. The sausages were sonicated for 27 min in an ultrasonic bath (25 kHz, 60% amplitude, normal mode, 20 °C) immediately after filling. The sodium reformulation strategy effectively compensated for the defects in the emulsion stability and texture profile caused by the NaCl reduction. Besides, the combination of HPU, MS, and KCl did not cause major impacts on the evolution of pH, Eh, and TBARS values of the sausages during storage (21 days at 4 ºC). The use of MS and KCl also allowed a reduction by 50% of the NaCl content (< 42% Na; Na/K ratio: 1.2 to 1.3) of the samples without affecting the salty taste, which was enhanced by the HPU treatment.

Keywords: Emerging technologies; salt replacer; healthier meat products; salty taste.