SODIUM REDUCTION IN COMMERCIAL FRANKFURTERS: EFFECTS OF PARTIAL REPLACEMENT OF SODIUM CHLORIDE BY POTASSIM CHLORIDE AND FLAVOR ENHANCERS

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High level of sodium intake is related to incidence of hypertension, which is one of the main risk factors of cardiovascular diseases. Frankfurters are one of most consumed meat products in the Brazil and they have high sodium content, in general, above 500mgNa/100g, because other additives contribute to this level in final products. Commercial frankfurters commonly have addition of mechanically deboned chicken meat (MDCM) as a principal raw material resulting in sensory and technological challenges to meat industry. Then, the objective of this study was replace 50% and 75% of NaCl by KCl in frankfurters added of 60% of MDCM including different flavor enhancers (disodium guanylate and disodium inosinate) and to evaluate their sensory properties. The products were submitted to a consumer study and a texture profile analysis. The reformulated frankfurters had significant reductions in hardness and chewiness. Despite the differences in the texture profile, consumers did not detect differences in texture between the control and the treatment with 50% replacement of NaCl with KCl and addition of disodium guanylate and disodium inosinate. Moreover, this treatment did not differ from the control in any other sensory attribute evaluated (color, aroma and taste). However, the sensory quality of the sausages with a 75% replacement and addition of disodium guanylate and disodium inosinate was poor compared with the full-salt control samples. These results suggest that sausages with healthier characteristics can be produced without sensory quality loss by replacing 50% NaCl by KCl and by adding 0.1% disodium guanylate and 0.1% disodium inosinate.