

# **Sensory characterisation and consumer acceptability of potassium chloride and sunflower oil addition in small-caliber non-acid fermented sausages with a reduced content of sodium chloride and fat**

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## **Abstract**

The effect of the simultaneous reduction of fat proportion (from 20% to 10% and 7%) and added salt (from 2.5% to 1.5%) and the subsequent addition of 0.64% KCl and sunflower oil (1.5% and 3.0%) on the physicochemical, instrumental colour and texture, sensory properties and consumer acceptability of small caliber non-acid fermented sausages (fuet type) was studied.

This simultaneous reduction of fat and salt increased weight loss, moisture, water activity ( $a_w$ ), redness, instrumental texture parameters (hardness, chewiness and cohesiveness), sensory attributes (darkness, hardness, elasticity) and the consumer acceptability. The subsequent addition of 0.64% KCl to the leanest batch decreased the  $a_w$  and barely affected instrumental texture parameters and consumer acceptability. Subsequent sunflower oil addition decreased hardness, chewiness and cohesiveness and increased crumbliness and oil flavour which may decrease the consumer acceptability. The simultaneous reduction of fat and NaCl with the addition of 0.64% KCl was the preferred option by the consumers.