

***OCIMUM GRATISSIMUM* AND COMMON SALT AS CURE INGREDIENTS IN BACON: A PRELIMINARY STUDY**

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ABSTRACT

Pork bellies harvested from 12 large which hogs slaughtered at the Kumasi Abattoir Company Limited were transported on ice to the Meat Processing Laboratory of the Department of Animal Science KNUST. The left bellies were cured with nitrite salt while the right halves were cured using common salt plus *Ocimum gratissimum* leaf extract to produce bacons labeled as NB and OB respectively. Acidity (pH) of cure solution before and after curing, color and smoking yields of bacon were determined. Sensory evaluation was performed by thirty consumer panelists in order to evaluate consumer acceptance of the products using a 9-point Hedonic scale (9 = like extremely; 1 = dislike extremely) for juiciness, flavor, taste, appearance, aftertaste, texture, mouth feel and acceptability of bacon. There were no significant differences ($p>0.05$) between NB and OB in terms of smoking yield. The pH of cure solutions for NB before and after curing (5.77 and 5.91) were significantly lower ($p<0.05$) than for OB (5.53 and 5.85). No significant differences ($p>0.05$) existed between NB and OB for L (lightness of meat) but there were significant differences ($p<0.05$) between NB (4.99) and OB (4.55) in terms of a* (red or magenta), as well as b* in NB (3.97) and OB (2.90). All the sensory parameters evaluated did not show significant differences at 5% level of significance. The initial and final total viable counts for NB and OB were both below 9.0cfu/g. It was concluded that *Ocimum gratissimum* with common salt as cure ingredients could potentially be useful in meat curing without any adverse effects on product yield and sensory profiles. More so, bacon with *Ocimum gratissimum* and common salt could be refrigerated at 2°C for three weeks without any adverse effects on microbiological quality.

Keywords: *Ocimum gratissimum*, streaky bacon, curing salt, common salt, smoking yield.