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***Staphylococcus aureus* SURVIVAL DURING MATURATION OF SERRANA GOAT CHEESE**

Mendonça, A.*, S. Santos, R. Valentim, R. Maurício, and T. Correia

ESA de Bragança, Campus Sta Apolónia, 5300-855 Bragança

*Corresponding author: alme@ipb.pt

Serrana cheese is a law protected product susceptible of transmitting *Staphylococcus aureus* since it is made of raw milk. This bacterium development can only be prevented by refrigeration temperatures and maturation.

S. aureus survival on Serrana goat cheese was tested because it is a common source of mastitis on goats. A native strain isolated (FCT Project, POCTI/1999/CVT/3482) from a local goat herd (Trás-os-Montes Portuguese Province) was inoculated on two cheese batches, one of them made with pasteurized milk.

Immediately after cheese production and thereafter weekly for four weeks *S. aureus* was counted and pH and a_w were assessed. Maturation temperature ranged from 5 to 12°C.

According to bibliography pH and a_w never meet critical values able to prevent bacterial development. However, ripening temperature is a well-known limiting factor, especially if associate with pH and a_w values diverting from optimum.

By the end of this study *S. aureus* concentrations were identical to initial values (3×10^4 cfu/g). This result was unexpected since *S. aureus* has been considered as a minor risk on cheese. Likely this native strain presented an unusual endurance to cheese ripening conditions becoming a possible public health risk. Its future biochemistry and molecular characterizations are expected to elucidate on this endurance ability.