

P003 Formation of biogenic amines in *Clúa* cheese treated by high hydrostatic pressure

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Clúa cheese is an artisan cheese made of raw goat milk produced in *Catalunya* (Spain). This kind of raw milk cheeses can contain high amounts of biogenic amines (BA). In this work we evaluated the use of high hydrostatic pressure (HHP) treatments during *Clúa* cheese processing in order to reduce the amounts of BA formed. 400 MPa HHP treatments were applied the 3rd, the 15th, and both the 3rd and 15th days of ripening. The combination of HHP treatments with the addition of nisin was also evaluated. 8 different biogenic amines were surveyed during the 60 days of ripening: histamine, tyramine, tryptamine, putrescine, cadaverine, β -phenylethylamine, spermine and spermidine. The application of the HHP treatments the 3rd day of ripening resulted in a reduction of about 49% in the total amount of BA, and close to 80% in the amount of tyramine and putrescine. HHP treatments applied only the 15th day of ripening hardly influenced the amount of BA formed. The addition of nisin did not reduce the amount of BA formed. Nevertheless, a slight increase in the amounts of cadaverine was observed.