

**P29. Manufacture and physico-chemical characterization of “white cheese” manufactured from camel milk - A comparison with cow milk**

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Camel milk is commonly consumed as raw milk or after its pasteurization. Another possible valorization of camel milk is to transform it in cheese. In this work, “white” cheese from camel milk was manufactured and characterized with attentions paid on the rates of acidification of milks, the recoveries of protein and fat and the mineralizations and buffering capacities of cheeses. To compare the behavior of camel milk to be transformed in cheese to this of cow milk, same protocols of manufacture and analyses were used. It is noteworthy that cow milk was previously standardized to have the same concentrations in fat (~20 g/kg) and total nitrogen (~25 g/kg) contents as those of camel milk.

The rates of acidification were different with 5.39 and 5.62 final pHs reached after 5h and 18h for cow and camel milks, respectively. The recovery of protein in the cheese was better for camel milk (~84%) than those determined for cow milk (~73%). In the opposite, the recovery of fat was better for cow milk than for camel milk (~68% and ~57%, respectively). Otherwise, cheeses manufactured with camel milk were richer in calcium than those made with cow milk. Concerning the buffering capacity, maximal capacities were determined at pH close to 6.0 for both cheeses. It was noted a second buffering area at pH 4.0 for cow milk but not for camel milk. All these results will be discussed in relation with our knowledge on cow milk and also by taking into account the composition and organization of camel milk (presence of specific proteins, pHi, size of fat globules, etc.)