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### **Somatic cells effect on low-fat goat cheese lipolysis**

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Somatic cells present lysosomal enzymes many of which pass to the milk where they cause more intense proteolysis and lipolysis. There are several opinions about the real effects of somatic cells on cheese, mainly due to the other collateral changes that occurs with the increase of somatic cells. The aim of this study was to evaluate the effects of two levels of somatic cells (200,000 or 2,000,000 cells/mL) on lipolysis of fresh cheese elaborated with full-fat and low-fat goat milk, using pasteurized and non-pasteurized milk, and ripened at 1 and 7 days. Somatic cells were isolated by centrifugation from healthy goat milk and added to milk with a low somatic cells count. The total free fatty acids content (FFA) was determined using the copper soap method modified for cheese analysis. The FFA concentration in dry matter basis was always higher in full-fat cheeses than low-fat cheeses, but FFA expressed in fat basis in cheese increased as fat content decreased. These results suggest that other parameters appear to have an influence on lipolysis in low-fat cheese. The small globule size found as fat content decrease in cheese may be more susceptible to lipase action. The lack of fat and the faster FFA liberation in low-fat cheeses may promote early FFA catabolism that occurs in cheese, with effects on the taste of the final product.