In cheesemaking, there is consensus of need for calcium addition to obtain best processing technology of milk. This study aimed to evaluate the effect of different conditions of pH and calcium addition on the texture of Minas cured cheese. Three cheeses produced at pH 5.8 with different calcium concentration were obtained from the coagulation of 10L of pasteurized milk each and added of starter culture to pre-acidification of milk. Other three cheeses produced at pH 6.6 with different calcium concentrations, did not have milk added with starter culture, and coagulation occurred in normal pH of milk. Then, for each pH, cheeses were produced with addition or not of 150 and 300ppm of CaCl₂. The texture of Minas cured cheeses was analyzed by uniaxial compression test and sensory test ordering. The instrumental evaluation shown that calcium addition influences texture of cheeses significantly, increasing the hardness of cheeses, independent of pH of milk clotting. Cheeses obtained without calcium addition, presented main values of compressive force 1247.14g and 610.76g to pH clotting 5.8 and 6.6, respectively. These values are lower than measured to cheeses added of 150 (2049.32 and 1828.28g) and 300ppm CaCl₂ (928.68 and 975.75g). However, the sensory panel did not find difference in hardness of cheeses produced at same pH of milk clotting in function of calcium chloride addition. There is no difference in texture of Minas cured cheese due to the calcium addition to milk for dairy products consumers, it brings a new perspective on manufacture for cheese makers.