The quality of milk derivatives like butter can be affected by chemical transformations, mainly through hydrolytic rancidity, producing low molecular weight fatty acids, which have volatile enough to be perceived by their odor even in small quantities. The physico-chemical analyses of butters reveal that the oil phase presents changes resulting from hydrolysis, rancidity or adulteration and are important sources for characterizing the quality of butters. To assess the quality of these products, three samples of four different brands (A, B, C and D) traded in south of Minas Gerais estate were analyzed for moisture, acidity of butter fat, determination of volatile substances, insoluble solids and fat, ash and chlorides. Tukey test (α=5%) was applied to evaluate differences between media valued obtained. The moisture content of the samples ranged from 14.06-27.51%, the acidity 1.97-4.25 milimoles/100 g of butter fat; volatile substances content 13.81-26.51%; fat content 71.54-84.03%, which showed significant difference (p<0.05) between samples. Results for insoluble solids content 1.95-2.55%; ash 0.94-3.46% and chlorides 0.12-0.15% showed no significant difference (p>0.05) between samples. Samples from A, B and C showed fat content below 82%, value required by law. Moisture content of butter from brands A, B and C were also outside required parameters (maximum of 16%). The results indicated that there are some products being marketed with the specification outside the requirements of the Brazilian laws.

Aknowledgement: FAPEMIG