Qualitative methods used for raw milk quality control present a description of the results based on color. The evidence of the presence or absence of adulterants and preservatives is conditional on the analyst's interpretation, which may be susceptible to error. This study aimed to construct a linear correlation curve for the determination of starch (adulterant) and hydrogen peroxide (preservative) addition in milk by colorimetry. Solutions were prepared from raw milk with the addition of starch at concentrations of 0.0, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.2, 1.4, 1.6, 1.8 and 2.0% (w/w) and 10 mL were taken as rate for the qualitative determination of the starch milk. Solutions from raw milk with the addition of hydrogen peroxide were prepared at concentrations of 0.0, 0.05, 0.1, 0.2, 0.3, 0.4 and 0.5% (w/w) and 10 mL aliquot was removed as for the qualitative determination of the peroxide hydrogen. For all solutions were the readings of the parameters L, a* and b* using a colorimeter and calculated the rate of browning. The data were then analyzed by linear regression, and found the Pearson coefficient equal to 0.8172 for the starch added and 0.8102 for the hydrogen peroxide added. Both coefficients are considered significant, enabling instruments to the colorimetric reading in qualitative methods for the milk quality control.