High sodium intake has been correlated with hypertension. NaCl, the main source of Na in meat products, has many technological functions including safety, sensory and texture properties. Then, it is great challenge to reduce Na in commercial formulations, as those with mechanically deboned poultry meat (MDPM). The objective of this study was to evaluate the stability to lipid oxidation (TBARS values) and the color (L*, a*, b*) of low salt frankfurters with different enhancers along 0, 15, 30, 45 and 60 days under cold storage. The following treatments were elaborated: control FC (2% NaCl), F1 (0.5% NaCl; 1.9% KCl; 0.1% of disodium inosinate and 0.1% disodium guanylate), F2 (1.0% NaCl; 1.27% KCl; 0.1% disodium inosinate and 0.1% disodium guanylate). The TBARS values of the F1 treatment (0.5% NaCl; 1.9% KCl and enhancers) showed higher values of TBARS at 0 and 30 days as compared with FC treatment (2.0% NaCl), but in general, the salt reduction in frankfurter added of different enhancers didn’t influence lipid oxidation. Regarding the color attributes, L * values (brightness) along storage, were different from control with significantly higher values (p<0.05). For parameters a * and b *, there was no difference among the treatments (p>0.05). At these levels of salt reduction and replacement by KCL more enhancers, no significant effects were observed in low cost frankfurter regarding color and lipid oxidation attributes.