CALCIUM CONTENT IN INDUSTRIALIZED MEAT PRODUCTS AND RELATIONSHIP WITH BONE PARTICLES AND MECHANICALLY SEPARATED MEAT FROM RAW MATERIALS.

Vanessa Bellucci Vergilio1, Juliana da Silva Agostini2. 1Pharmacy student from the University Center of Grande Dourados - UNIGRAN, Brazil. 2Guideline of research and currently professor at the Institute of Health Sciences, Federal University of Mato Grosso - UFMT, Campus of Sinop, Mato Grosso, Brazil. e-mail: juagostini@yahoo.com.br.

The aim of this study was to assess the relationship between the calcium content of processed meat products and bone particle content and quantity of CMS used in these products. Data were collected for analysis of bone particles in raw meat products (CMS) and data analysis of calcium content in finished meat products, from an industry of meat products from MS. We used data from the calcium content in 10 samples of each of the following products: sausage thin, a straight sausage and pepperoni sausage, fresh sausage (free CMC), hot dog sausage, longet frankfurters and light chicken sausages light, smoked mortadella, chicken mortadella and mortadella with cubes of fat. Also data were obtained from bone particles evaluated in CMS utilized in the manufacture of the lots picked as a sample of this research. The calcium content in the frankfurters samples was significantly higher (0.29%) compared with the mortadella (0.18%) and sausage (0.16%). The frankfurters has a higher concentration of CMS in its formulation, which led to the higher concentration of calcium. There were significant correlations between calcium and bone particles into sausages, mortadella and frankfurters. The higher the amount of bone particles in the raw material higher amount of CMS is used in the formulation and higher is the calcium content. The calcium content in fresh sausages (0.05%) was lower than the other types (0.16%, 0.18% and 0.13%). The exemption from CMS in the fresh product reduces bone particles and justifies the result.