Objective: To determine whether the inclusion of a new modified meat product as a dietary supplement has a positive influence on the nutritional status and blood lipid profile of institutionalized elderly subjects. Method: A sample population of elderly people living in institutions (9 men and 29 women aged 68-97 years) completed a crossover study with two dietary supplements. Nutritionally complete diets differed only in food supplementation, first, with a standard meat product and, subsequently, with a modified meat product. Venous blood samples were taken prior to each of the three phases of the study: the basal phase, during which participants followed their normal, controlled diet; a control phase (3 days per week for 3 weeks), during which the subjects' normal diet was supplemented with 50 g of the standard product; and an experimental phase (3 days per week for 3 weeks), when the normal diet was supplemented with 50 g of the modified product. Results: Nutritional intervention did not influence hematological parameters or serum lipids. The modified meat product altered blood concentrations of urea, creatinine, GOT, transferrin, iron, and retinol-binding protein. Conclusions: Consumption of both the standard and the modified products contributes to maintaining the individuals' nutritional status and equalizes nutritional status across the study population with no effect on blood lipid profiles. Despite the limitations of the experiment, the introduction of dietary supplements in meat products significantly increased plasma iron levels in this elderly sample.

Keywords
Meat emulsion, Oleic acid, Lipoprotein, Nutritional status, Elderly people.