The animals digestive ability and function can be controlled by diet. The nutritional plan has a marked influence on how fast the values inversion will occur for measurement values between the ruminants pre-stomach compartments. The objective of this study was to evaluate the different liquid diets influence based on whey powder cheese associated with powdered milk on the yield of white edible viscera of calves to 60 days. Twenty four crossbred calves were used, with 5 ± 3 days of age and initial average weight of 35 kg. The animals were distributed in completely randomized design (CRD) with four treatments and six replicates: whole milk; powdered milk; 80% milk powder + 20% whey powder cheese; 60% milk powder + 40% whey powder cheese. The calves received colostrum from birth day to three days of life and from the fourth to the tenth day integral milk, as farm routine. The animals adaptation was the ten days prior to the experiment beginning. The animals had access to concentrate, Tifton hay and water. At 60 days of age they were weighed and underwent a fast for 16 hours. In the following morning, they were weighed, obtaining slaughter weight. After slaughter, all parts were weighed and registered. The cavity organs were weighed with content and then emptied, washed, drained and weighed again, registering therefore the full and empty weights, respectively. The data were submitted to variance analysis and the effects of the different treatments on each variable were compared through the Tukey test, at a 5% probability level. The diets tested would not interfere in the edible white viscera weights in the proposed treatments with a average weight of 0.91, 0.13, 0.33, 1.78 and 0.55 kg (rumen/reticulum, omasum, abomasum, small intestine and coarse, respectively), indicating that the diets tested provided adequate growth, similar to those obtained with the control diet. Body components are associated with differences in nutritional maintenance requirements of animals. The different liquid diets were not sufficient to interfere in the development of the gastrointestinal tract, since no difference was observed in the weight of the compartments, mainly in the abomasum weight, since this is the most important compartment in the animals digestive process in the lactation phase. The substitution of milk by liquid diets based on whey powder cheese as an alternative feeding for calves doesn’t affect edible white viscera weights.

Keywords: carcass, substitute, weight