The animal gender influences the body weight gain and carcass composition in beef cattle. The immunocastration with a vaccine against gonadotrophin releasing factor has been carried out in order to take advantage of the greater growth performance of bulls, reduce their aggressive behavior and increase carcass fat, enabling the production of high quality meat. The present study aimed to determine the meat chemical composition of non-vaccinated bulls and bulls that were immunocastrated. Twenty Nellore bulls were fed in feedlots and distributed into two treatments with 10 animals each as follows: control (non-vaccinated bulls) and immunocastrated bulls (vaccinated with Bopriva®, Pfizer Animal Health). Cattle were slaughtered when reached an average live weight of 479 kg. At slaughter, the left half-carcasses were sectioned at the 13th rib level and a longissimus dorsi muscle sample was obtained. The sample was ground and the percentages of moisture, ether extract, crude protein and mineral matter content were determined according to AOAC (1990). Data were subjected to analysis of variance using the statistical software SAEG (UFV, 1997). Significant differences were observed (P<0.05) in moisture content and ether extract, however, there were no differences between treatments for the other variables. Non-vaccinated bulls presented higher moisture content (75.06 %) but lower ether extract (1.02 %) in meat when compared to immunocastrated cattle (74.20 % moisture content and 1.58 % ether extract), indicating that immunocastrated cattle have greater deposition of intramuscular fat. Immunocastration decreases water content and increases the fat amount in meat of Nellore bulls.