Euphorbia tirucalli Lineu (aveloz) is a succulent plant species of well known hepatotoxicity and antitumoural activity in Brazil and in traditional medicine around the world. The aim of this study is to evaluate the influence of methods of preparations of aveloz latex in extremely diluted solutions (latex-EDS) upon the biological response of healthy mice. 13 groups of 5 mice were treated for 4 months with latex-EDS diluted in DMSO and latex-EDS prepared by triturating in lactose at the potencies of 5CH, 15CH and 30CH. No morphological changes were observed in leucocytes from peripheral blood plate among the analyzed groups. However, there was significant statistic variation on the absolute number and the percentage index of mice lymphocytes which were treated with lactose triturated latex ($P < 0.05$). Results suggest that the method used to prepare EDS of aveloz may influence the biological response of healthy mice.