

ABSTRACT

Probiotics imparts and boosts the immune system of the host in adequate amount. The effect of commercial based and laboratory isolated probiotics on immune system of wistar rats was studied. For this purpose 17 wistar rats were randomly placed in five groups; 0-dy, positive control, negative control (commercially based *Lactobacillus acidophilus*), PRO-1 and PRO-2 (laboratory isolated probiotics *Lactobacillus plantarum* 1 and *Lactobacillus plantarum* 2). The immune system parameters were evaluated by Heamatological and serum chemistry tests of blood. The damage in the liver and thymus was studied through histopathology. The viability and survival of probiotics (*Lactobacillus acidohillus*, *Lactobacillus plantarum* 1 and *Lactobacillus plantarum* 2) was assessed by the fecal analysis of the wistar rats. It was observed on the basis of blood tests that the immune system was boosted and improved in probiotic treated groups as compared to control group. No organ damage was observed in any of the group. Fecal analysis tests showed positive for the probiotics and this indicates the colonization of probiotics in the gut of rats.