Aims: Aspirin has a side effect of mucosal damage even at low doses. The aim of the present study was to investigate the efficacy of kefir in the prevention of gastric damage produced by aspirin.

Materials and methods: In the present study, 32 male Wistar-Albino rats were divided into four equal groups. First group (Control) and 2nd group (Aspirin) were administered 2 ml serum physiologic for seven days. Third group (Kefir) and 4th group (Kefir + Aspirin) were administered 2 ml kefir solution instead of serum physiologic. On the eight day, aspirin and Kefir + Aspirin groups were administered 200 mg/kg aspirin, three hours before being sacrificed. All stomach mucosa was examined and mucosal damage scores were evaluated.

Results: In Kefir + Aspirin group, macroscopic damage score was higher than Control (P=0.002) and Kefir (P=0.028) groups, and lower than Aspirin group (P=0.005). Histological damage scores in Kefir + Aspirin group were similar to those in control and kefir groups and significantly lower than Aspirin group (P<0.001).

Conclusion: It was established that kefir prevents aspirin-induced gastric damage in experimental model.