Erişte, also called “Kesme”, is a traditional noodle-like product in Turkish cuisine. It is made from flour, egg, water, salt and milk, worked into a dough, then rolled flat and cut into thin strips. It may be optionally dried for long time storage or is consumed as fresh. The shelf life of fresh Erişte is limited due to its high water activity and type of ingredients used. Modified atmosphere packaging (MAP) is an effective food preservation method, used with refrigeration could provide a considerably shelf-life extension for various foods. In this study, fresh Erişte was produced with the addition of kefir and the effect of kefir on fresh Erişte quality, along with modified atmosphere packaging, were determined. Samples added kefir was produced with a kefir/dough ratio of 1:3 (v/w). In control samples (C) whole milk was used instead of kefir. Only samples with kefir were packaged under 50 %CO2/50%N2, and 100% N2 gas atmospheres were used. C and control with kefir (CK) samples were packaged in LDPE pouches. All samples were stored in the refrigerator (4 °C) for 17 days. pH, total acidity, water activity, moisture content, microbiological counts (Total bacteria, Lactobacillus spp., Lactococcus spp., yeast-mold counts) and sensorial properties were determined. Samples containing kefir exhibited higher total acidity and lower pH values than C samples. Water activity and moisture content did not show significant change during storage. In CK, N2 and CO2 samples; total bacteria, Lactobacillus spp., Lactococcus spp. counts followed higher trend than C sample. Yeast-mold counts increased in C samples, while in resulting a decrease in rest of the samples. C samples were discarded due to visible mold growth at 10-day of storage. Samples packaged in 100% N2 have higher sensorial scores than other samples at the end of the storage. It was concluded that MAP treatment and kefir addition to dough extended the shelf life of fresh Erişte.