The aims of this research was determining the effect of storage temperature on the decay of sold beef from one of the traditional market in Surabaya. There were two group of temperature treatment on it. Chilling temperature and room temperature would be the difference these treatments. The research used 3 samples of tenderloin meat that had been using Eber test as much as 360 grams of 3 different merchants. In Eber test meat samples stored at room temperature and chilling temperature and then tested every 3 hours. After that pour the reagent in the tube Eber then input plug that already contain meat. If the test shows that there NH4Cl mist above reagents, the meat of the positive (+) decay. Meanwhile, when no visible haze NH4Cl above reagents, the flesh does not decay (-). Results of research conducted in January 2011 showed that meat stored at room temperature for more rapid decay than those stored at chilling temperature.

Keywords: Meat, traditional markets, storage temperature