

**THE EFFECTS OF PACKAGING METHODS AND STORAGE PERIOD  
ON SOME PHYSICOCHEMICAL AND MICROBIOLOGICAL  
PROPERTIES OF CUBED AND MINCED BEEF MEAT**

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In this study it was aimed to determine physicochemical and microbiological evolutions of aluminum film covered (A), cling film covered (C), vacuum packaged (V), freezer bag (F), modified atmosphere packaging with 240 gr (MAP 240) and modified atmosphere packaging with 460 gr (MAP 460) cubed and minced beef samples stored at +4<sup>o</sup>C during 15 days. In order to determine the physicochemical evolutions, pH, humidity and color measurements (L\*a\*b\*) were applied to the samples at the beginning and 3<sup>rd</sup>, 6<sup>th</sup>, 9<sup>th</sup>, 12<sup>th</sup> and 15<sup>th</sup> days of the storage. Total mesophilic aerobic bacteria count, total psychrotrophic bacteria count, coliform bacteria and yeast-mould analyses were applied to the samples to detect the microbiological evolutions at the same sampling periods. According to the method of packaging, L\*a\*b\* values and in terms of storage days, a\* and b\* values were found statistically different in minced meat samples (p>0,05). The samples of minced meat MAP 240 were found that they protected their properties for consumption at 9<sup>th</sup> day of storage. According to the method of packaging, L\* values and in terms of storage days L\*, a\*, b\* values were found statistically different in cubed meat samples (p>0,05). The samples of cubed meat MAP 240 were found that they protected their properties for consumption at 15<sup>th</sup> day of storage. During the storage, the packaging group C was found to be unstable. The packaging with less product like MAP 240, was determined to be more effective in protecting their quality characteristics of cubed and minced meat during storage.

Keywords: beef, cubed meat, minced meat, packaging, storage

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