THE EFFECT ON FREE AMINO ACID COMPOSITION OF DIFFERENT NITRITE LEVELS IN PASTIRMA PRODUCTION, A TURKISH DRY MEAT PRODUCT

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This study was carried out to determine the effects of different levels of nitrite use on free amino acids (FAA) composition of pastırma. With this purpose, sodium nitrite ($NaNO_2$) of 0, 50, 100 and 150 ppm levels was added to the pastırma at the curing stage. In production stages of pastırma (Raw material, dry curing, second drying, pastırma), FAA compositions were determined. The nitrite levels and the production stages had significant effects ($p<0.01$) on the FAA composition. Compared to the control group, the amounts of serine, threonine, tyrosine, histidine and lysine increased while the amounts of glycine, glutamine and arginine decreased in the pastırma groups with nitrite. The glutamic acid, aspartic, serine, threonine, phenylalanine, arginine, isoleucine, leucine, lysine, tryptophane and valine amounts of pastırma were higher than the raw material. In terms of FAA amounts, significant differences were determined between the control and nitrite groups at the end of the pastırma production, and the highest values were found in the pastırma groups with nitrite. However, the lowest FAA amounts were in the 150 ppm as compared with 50 and 100 ppm.

Keywords - Pastirma, Dry cured meat, Free amino acid composition