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List of Abbreviations

Abbreviation	Meaning
BHA	Butylated hydroxy anisole
BHT	Butylated hydroxy touluene
CO	Cholesterol oxidation
EDTA	Ethylene diamine tetra acetic acid
EOS	Egyptian organization for standardization
FFA	Free fatty acid
GC	Gas chromatography
MDC	Mechanically deboned chicken
MUFAS	Mono unsaturated fatty acid
PUFAS	Polyunsaturated fatty acids
PV	Perioxide value
SFAS	Saturated fatty acids
TBA	Thiobarbituric acid
TBARS	Thiobarbitituric acid reactive substance
TMUFAS	Total monounsaturated fatty acids
TPUFAS	Total poly unsaturated fatty acids

TSFAS	Total saturated fatty acids
WOF	Warmed-over flavor

7. Summary

Ninety random samples of fresh poultry meat were collected from different poultry slaughtered shops in Tanta city, Gharbia government. The examined samples were breast, thigh cuts of duck, chicken and turkey (15 of each).

All collected samples were kept in a separated sterile plastic bag and preserved in an ice box. Then transferred as quickly as possible to the laboratory with a minimum limit of delay.

Keeping quality tests of these samples showed that the average value of TBA (mg/kg), PV (meq/O2/kg) and FFA (mg%) were 0.52±0.03, 0.85±0.09 and 0.69±0.07 for duck thigh samples and 0.40±0.02, 0.64±0.07 and 0.52±0.05 for duck breast samples where as for chicken thigh samples were 0.33±0.02, 0.57±0.08 and 0.45±0.06 respectively. While, for chicken breast sample were 0.09±0.01, 0.41±0.05 and 0.36±0.03. Plus, 0.15±0.01, 0.33±0.04 and 0.28±0.02 for turkey thigh samples, as well as 0.12±0.01, 0.27±0.02 and 0.20±0.03 for turkey breast samples.

Actually, all examined samples were accepted according to (**EOS**) (**2005**) as TBA results as not exceeded 0.9.

There were highly significant differences ($P<0.01$) associated with the results of TBA, PV and FFAs in the examined samples.

On the other hand, the fractionation of fatty acid composition (mg/100g) as total saturated fatty acids, total mono-unsaturated fatty acids and total poly-unsaturated fatty acids were 2481, 1660, 745 & 2253, 1741 and 869 for duck thigh and breast samples, respectively.

As well as 2164, 1793 and 884 & 1959, 1872 and 967 for chicken thigh and breast samples, respectively.But for 1754, 1885 and 1028 & 1408, 2012 and 1136 for turkey thigh and breast samples

Finally mean value of total lipolytic bacterial count (cfu/g) were $6.61x10^4 \pm 1.02x10^3$, $2.98x\ 10^4 \pm 0.47x10^4$ and $5.16x10^3 \pm 0.93x10^3$ for thigh samples&$3.8x10^4 \pm 0.58\ x10^4$, $9.26x10^3 \pm 2.15x10^3$ and $4.07x10^3 \pm 0.73x10^3$ for breast of duck, chicken and turkey samples ,respectively.