

OxiKan R
Study on shelf life
enhancement of
Chicken and Buffalo
patties using OxiKan R

oxikan
EXTENDING SHELF LIFE NATURALLY



OxiKan CL has won the
IFT Food Expo
Innovation Award.

World
Beverage
Innovation
Awards 2016@
BrauBeviale
WINNER



OxiKan CLS has won
the Best Beverage
Ingredient Award.

Objective: To compare the impact of OxiKan R and BHT in the shelf life of Chicken & Buffalo patties.

Method: TBARS (Thiobarbituric Acid Reactive Substances) Study-Thiobarbituric Acid Reactive Substances or TBARS analysis is the most common method to test lipid oxidation in meat. Lipid oxidation in meat produces malonaldehyde, which on reacting with TBA results in a fluorescent substance. This fluorescent substance is quantified and taken as a measure for lipid oxidation level. The lesser the production of malonaldehyde, the higher will be the shelf life.

DOSAGE

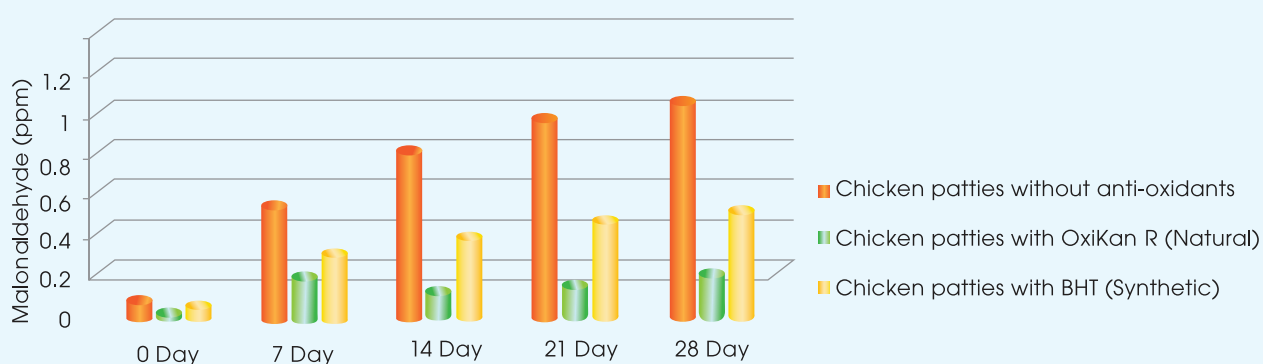
Anti-oxidants	Dosage in ppm
BHT (Synthetic)	Equivalent to 100 ppm of BHT
OxiKan R (Natural)*	Equivalent to 100 ppm Carnosic acid

*Refined rosemary extract with 2.5% CA at a dosage of 0.4% is equivalent to 100 ppm Carnosic acid

RESULT

Comparison of lipid oxidation in cooked Chicken patties during storage at 4° C

Sample	Malonaldehyde (ppm)				
	0 Day	7 Day	14 Day	21 Day	28 Day
Chicken patties without anti-oxidants	0.103	0.568	0.832	1.013	1.088
Chicken patties with OxiKan R (Natural)	0.017	0.206	0.099	0.152	0.231
Chicken patties with BHT (Synthetic)	0.077	0.35	0.43	0.485	0.552

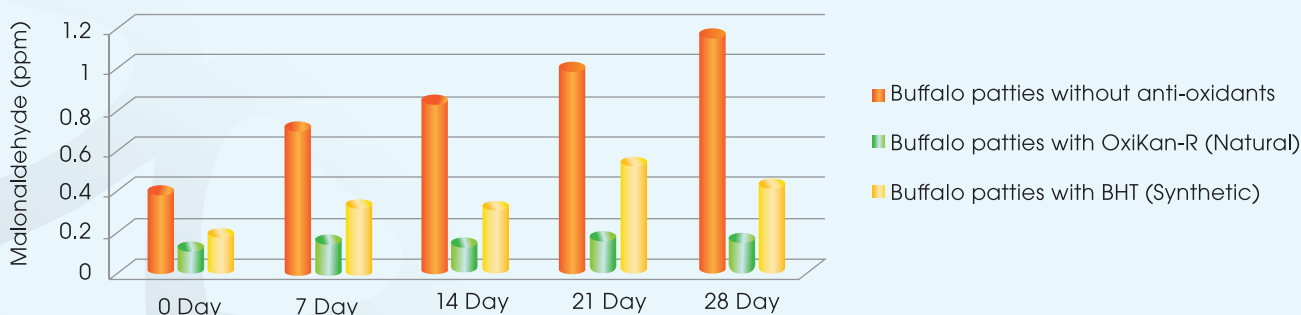


INFERENCE

From the above study, it can be observed that OxiKan R is more effective than BHT in the stabilisation of cooked chicken patties.

Comparison of lipid oxidation in cooked Buffalo patties during storage at 4°C

Anti-oxidants	Malonaldehyde (ppm)				
	0 Day	7 Day	14 Day	21 Day	28 Day
Buffalo patties without Anti-oxidants	0.368	0.688	0.817	1.003	1.15
Buffalo patties with OxiKan-R(Natural)	0.083	0.094	0.074	0.102	0.087
Buffalo patties with BHT (Synthetic)	0.153	0.276	0.26	0.47	0.415



INFERENCE

From the above study, it can be observed that OxiKan R is more effective than BHT in the stabilisation of cooked buffalo patties.