

**Table 1.** Effect of concentration of acetic acid on microbiological quality of Shawarma during storage at 4°C

Bacteria	TVC					Enterobacteriaceae					Coliform				
	0.0	4	8	12	16	0.0	4	8	12	16	0.0	4	8	12	16
Storage period (day)															
Acid concentration															
5%	6.4×10 <sup>5</sup>	8.0×10 <sup>5</sup>	8.5×10 <sup>5</sup>	8.6×10 <sup>5</sup>	9.0×10 <sup>5</sup>	7.9×10 <sup>2</sup>	6.7×10 <sup>2</sup>	5.5×10 <sup>2</sup>	5.1×10 <sup>2</sup>	5.0×10 <sup>2</sup>	4.5×10 <sup>2</sup>	N.D.	N.D.	N.D.	N.D.
7.5%	4.3×10 <sup>5</sup>	4.6×10 <sup>5</sup>	8.0×10 <sup>5</sup>	8.3×10 <sup>5</sup>	8.5×10 <sup>5</sup>	5.4×10 <sup>2</sup>	5.1×10 <sup>2</sup>	4.2×10 <sup>2</sup>	3.8×10 <sup>2</sup>	3.1×10 <sup>2</sup>	4.0×10 <sup>2</sup>	N.D.	N.D.	N.D.	N.D.
10%	4.0×10 <sup>4</sup>	4.7×10 <sup>4</sup>	4.8×10 <sup>4</sup>	5.6×10 <sup>4</sup>	6.0×10 <sup>4</sup>	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
12.5%	2.3×10 <sup>4</sup>	3.2×10 <sup>4</sup>	3.8×10 <sup>4</sup>	4.0×10 <sup>4</sup>	8.5×10 <sup>4</sup>	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

\*N.D. = Not Detected.

**Table 2.** Effect of concentration of acetic acid on pH and TBA of Shawarma during storage at 4°C

Parameter	pH					TBA				
	0.0	4	8	12	16	0.0	4	8	12	16
Storage period (day)										
Acid concentration										
5 %	6.14±0.01	6.13±0.01	6.13±0.03	6.13±0.01	6.14±0.01	0.057±0.002	0.063±0.004	0.075±0.005	0.086±0.007	0.094±0.005
7.5 %	6.17±0.02	6.11±0.03	6.10±0.02	6.10±0.01	6.11±0.01	0.056±0.003	0.064±0.007	0.076±0.007	0.087±0.005	0.096±0.005
10 %	6.10±0.01	6.10±0.02	6.10±0.01	6.10±0.02	6.11±0.03	0.056±0.007	0.065±0.004	0.076±0.007	0.086±0.004	0.097±0.007
12.5 %	6.10±0.02	6.10±0.02	6.11±0.02	6.10±0.01	6.11±0.02	0.057±0.007	0.068±0.002	0.076±0.005	0.087±0.005	0.088±0.006

TBA = Thiobarbituric acid as malonaldehyde absorbance / kg oil.

**Table 4.** Effect of acetic acid concentration on sensory properties of cooked Shawarma before and after storage at 4°C for 16 days

Properties	Colour					Aroma (odour)					Taste				
Storage period (day)	0.0	4	8	12	16	0.0	4	8	12	16	0.0	4	8	12	16
<b>Acid concentration</b>															
5 %	3.02	3.04	3.08	3.11	3.12	2.98	3.00	3.01	3.06	3.05	2.97	2.96	2.95	2.97	2.95
7.5 %	2.57	2.59	2.60	2.60	2.61	2.78	2.91	2.99	3.00	3.02	2.91	2.91	2.90	2.92	2.92
10 %	2.65	2.66	2.68	2.67	2.68	2.89	2.96	2.99	3.01	3.05	3.06	3.07	3.09	3.09	3.10
12.5 %	2.50	2.52	2.53	2.55	2.55	2.92	2.94	2.98	3.00	3.06	2.94	2.95	2.93	2.96	2.95

**Table 4.** Cont.

Properties	Texture					Overall acceptability				
Storage period (day)	0.0	4	8	12	16	0.0	4	8	12	16
<b>Acid concentration</b>										
5 %	3.40	3.60	3.60	3.60	3.60	2.93	2.92	2.92	2.92	2.93
7.5 %	3.40	3.60	3.60	3.60	3.50	2.90	2.91	2.89	2.88	2.91
10 %	4.20	4.20	3.60	3.60	3.50	3.12	3.11	3.13	3.10	3.09
12.5 %	3.60	3.80	3.60	3.40	3.40	2.94	2.93	2.92	2.91	2.93