

1   Supplementary material

2   **Table 5.** Specific volume of and texture analysis of the steamed bread fortified with  
3   various levels of quercetin (0 - 0.8%)

Sample	Specific (cm <sup>3</sup> /g)	Volume	Hardness (N)	Springiness	Cohesiveness	Chewiness (N)	Resilience
Control (0%)	3.02±0.05 <sup>a</sup>	305.96±18.55 <sup>a</sup>	1.05±0.04 <sup>a</sup>	0.90±0.08 <sup>a</sup>	287.81±19.84 <sup>a</sup>	0.57±0.08 <sup>a</sup>	
0.05%	2.96±0.13 <sup>a</sup>	332.35±19.35 <sup>a</sup>	1.08±0.13 <sup>a</sup>	0.88±0.08 <sup>a</sup>	314.22±40.66 <sup>a</sup>	0.56±0.01 <sup>b</sup>	
0.10%	2.95±0.12 <sup>a</sup>	323.31±31.34 <sup>a</sup>	1.01±0.03 <sup>a</sup>	0.90±0.01 <sup>a</sup>	294.09±24.33 <sup>a</sup>	0.56±0.01 <sup>b</sup>	
0.20%	2.94±0.13 <sup>a</sup>	316.05±24.31 <sup>a</sup>	1.04±0.08 <sup>a</sup>	0.89±0.01 <sup>b</sup>	292.03±29.27 <sup>a</sup>	0.56±0.01 <sup>b</sup>	
0.40%	2.98±0.11 <sup>a</sup>	311.74±37.27 <sup>a</sup>	1.02±0.06 <sup>a</sup>	0.88±0.01 <sup>b</sup>	280.72±31.71 <sup>a</sup>	0.56±0.01 <sup>b</sup>	
0.80%	2.93±0.17 <sup>a</sup>	327.49±30.93 <sup>a</sup>	1.05±0.09 <sup>a</sup>	0.88±0.01 <sup>b</sup>	304.56±33.36 <sup>a</sup>	0.56±0.01 <sup>b</sup>	

4   Data values in the same column with different superscript letters are significantly  
5   different ( $p < 0.05$ ).

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13 **Table 6** Colour parameters ( $L^*$ ,  $a^*$  and  $b^*$ ) of steamed bread enriched with various

14 levels of quercetin (0 - 0.8%)

Sample	Skin			Crumb		
	$L^*$	$a^*$	$b^*$	$L^*$	$a^*$	$b^*$
Control (0%)	82.53±0.18 <sup>a,A</sup>	-1.04±0.01 <sup>a,A</sup>	14.34±0.24 <sup>f,A</sup>	77.00±0.32 <sup>a,B</sup>	-0.85±0.03 <sup>a,B</sup>	12.97±0.51 <sup>f,B</sup>
0.05%	76.55±0.55 <sup>b,A</sup>	-3.15±0.07 <sup>b,A</sup>	24.67±0.42 <sup>e,A</sup>	73.64±0.68 <sup>b,B</sup>	-3.00±0.09 <sup>b,A</sup>	22.22±0.55 <sup>e,A</sup>
0.10%	75.34±0.44 <sup>c,A</sup>	-3.14±0.09 <sup>b,A</sup>	28.74±0.47 <sup>d,A</sup>	71.39±0.71 <sup>c,B</sup>	-3.01±0.06 <sup>b,A</sup>	26.02±0.44 <sup>d,A</sup>
0.20%	75.24±1.02 <sup>c,A</sup>	-3.97±0.11 <sup>c,A</sup>	30.08±0.88 <sup>c,A</sup>	69.74±1.15 <sup>d,B</sup>	-3.59±0.07 <sup>c,B</sup>	27.89±0.80 <sup>c,A</sup>
0.40%	74.82±0.54 <sup>c,A</sup>	-4.45±0.10 <sup>d,A</sup>	34.14±0.31 <sup>b,A</sup>	68.85±1.07 <sup>d,B</sup>	-4.26±0.15 <sup>d,A</sup>	31.58±0.87 <sup>b,A</sup>
0.80%	75.59±0.59 <sup>bc,A</sup>	-6.21±0.21 <sup>e,A</sup>	44.47±0.58 <sup>a,A</sup>	69.98±1.39 <sup>d,B</sup>	-6.06±0.04 <sup>e,A</sup>	42.08±0.64 <sup>a,A</sup>

15 Data values in the same column with different lowercase superscript letters are

16 significantly different ( $p < 0.05$ ) across the quercetin percentage. At the same

17 quercetin addition level, for each parameter (i.e.  $L^*$ ,  $a^*$  and  $b^*$ ), data values with

18 different uppercase superscript letters are significantly different ( $p < 0.05$ ) between

19 bread skin and bread crumb.

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