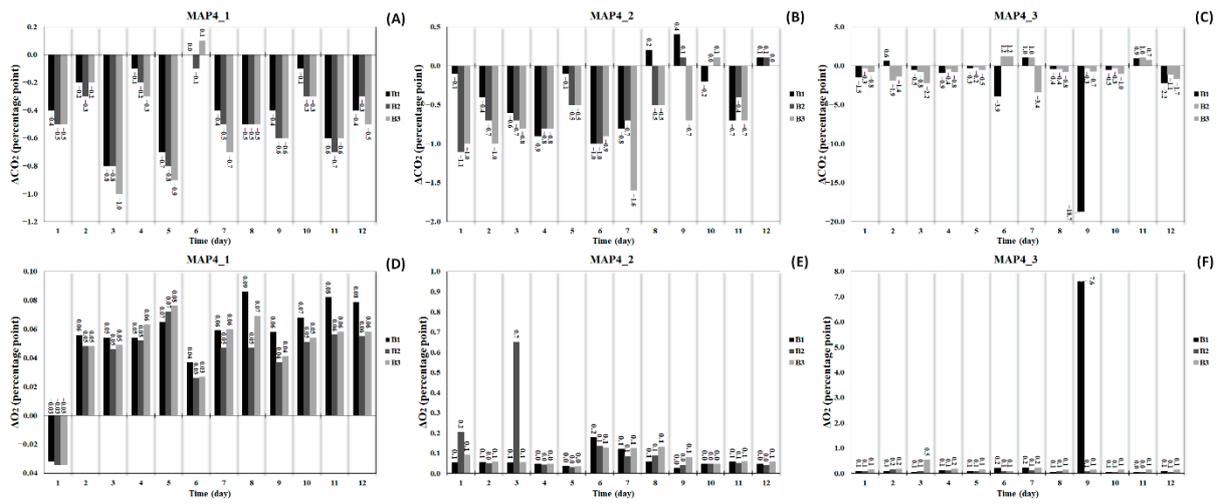


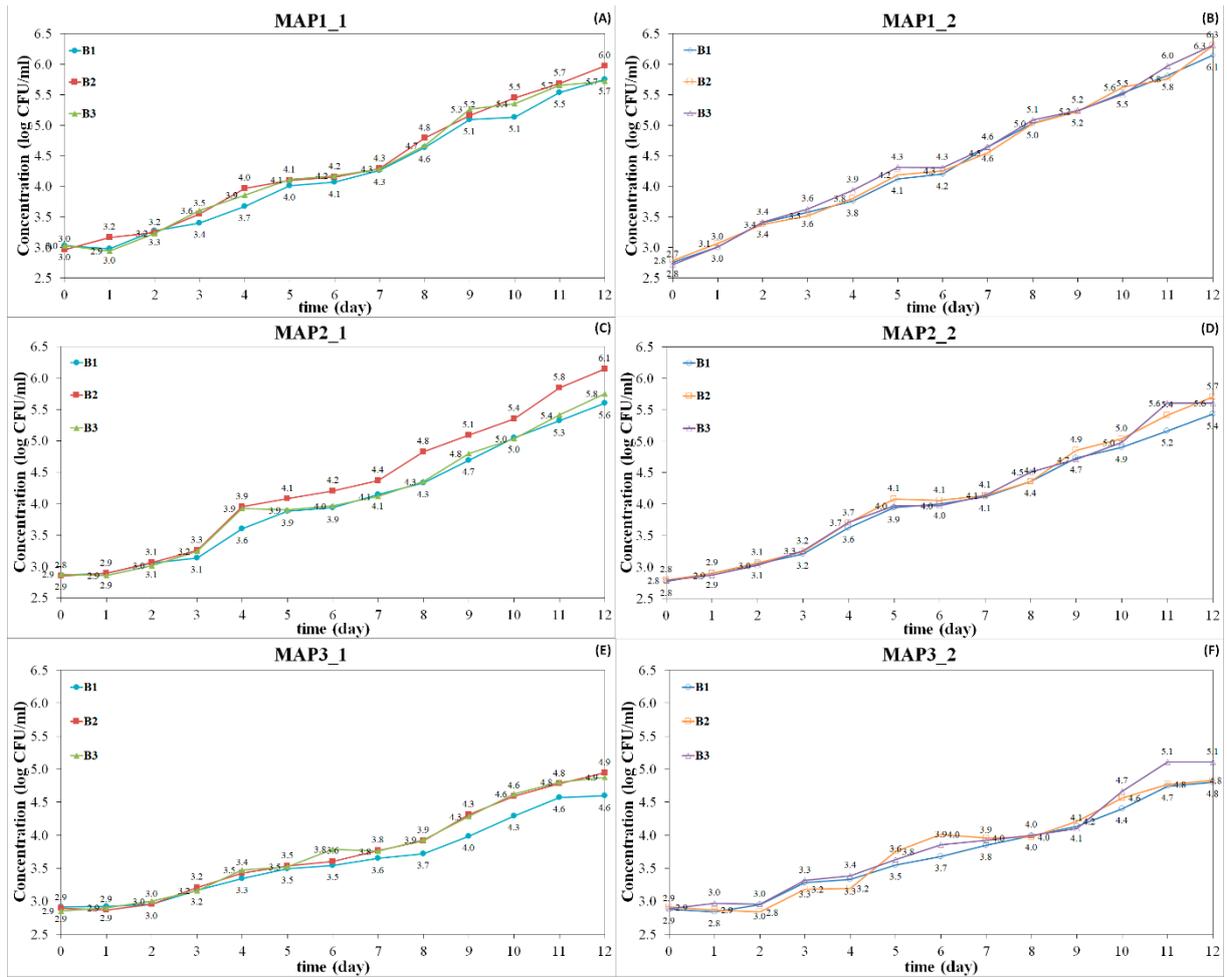
## Supplementary Material

**Table S1.** Minimum and maximum levels (%) of O<sub>2</sub> and CO<sub>2</sub> in the measured gas mixtures introduced to the gas-washing bottle incubation system (GBIS) for each condition during 13 consecutive days

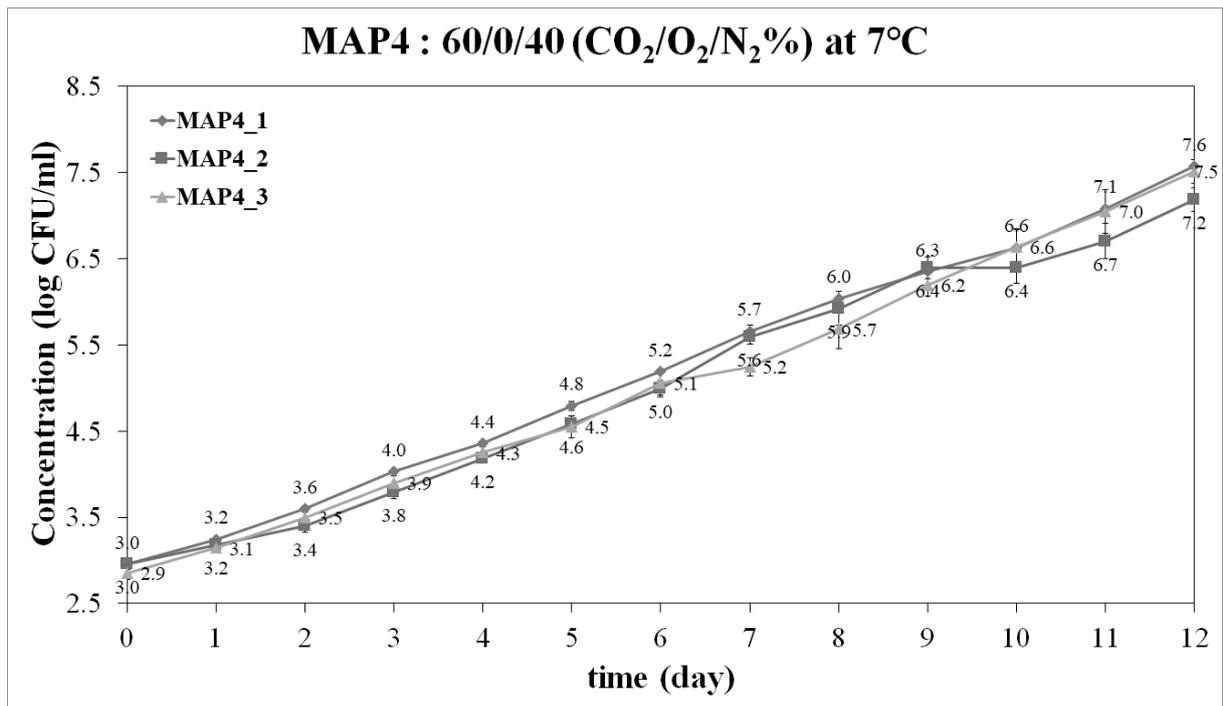
<b>Conditions</b> (O <sub>2</sub> %/ CO <sub>2</sub> %/ N <sub>2</sub> %)	<b>Flushing gas composition</b>	
	<b>O<sub>2</sub>% (min:max)</b>	<b>CO<sub>2</sub>% (min:max)</b>
<b>MAP1 (0/20/80)</b>		
MAP1_1 (1st experiment)	0.01 : 0.09	20.1 : 22.4
MAP1_2 (2nd experiment)	0.00 : 0.01	20.0 : 21.1
<b>MAP2 (0/40/60)</b>		
MAP2_1 (1 <sup>st</sup> experiment)	0.00 : 0.01	40.0 : 41.0
MAP2_2 (2 <sup>nd</sup> experiment)	0.00 : 0.01	40.0 : 41.7
<b>MAP3 (0/60/40)</b>		
MAP3_1 (1 <sup>st</sup> experiment)	0.01 : 0.10	60.0 : 61.6
MAP3_2 (2 <sup>nd</sup> experiment)	0.01 : 0.02	60.0 : 62.5



**Figure S1.** Overnight changes in headspace CO<sub>2</sub> and O<sub>2</sub> concentration in 1st bottle (B1), 2nd bottle (B2) and 3rd bottle (B3) under the following condition CO<sub>2</sub>%/O<sub>2</sub>%/N<sub>2</sub>%: 60/0/40 at 7 °C for MAP4\_1: 1st experiment (A and D), MAP4\_2: 2nd experiment (B and E), and MAP4\_3: 3rd experiment (C and F).



**Figure S2.** Growth curves obtained from 1st bottle (B1), 2nd bottle (B2) and 3rd bottle (B3) for following conditions CO<sub>2</sub>%/O<sub>2</sub>%/N<sub>2</sub>%: 20/0/80 for MAP1\_1: 1st experiment (A) and for MAP1\_2: 2nd experiment (B), 40/0/60 for MAP2\_1: 1st experiment (C) and MAP2\_2: 2nd experiment (D), 60/0/40 for MAP3\_1: 1st experiment (E) and MAP3\_2: 2nd experiment (F).



**Figure S3.** Growth curves of *L. monocytogenes* within a 13-day experiment under the following condition CO<sub>2</sub>%/O<sub>2</sub>%/N<sub>2</sub>%: 60/0/40 for MAP4\_1: 1st experiment, MAP4\_2: 2nd experiment, and MAP4\_3: 3rd experiment (error bars denote standard deviation, *n*=3 for MAP4\_1 MAP4\_2 and MAP4\_3).