

**Table S1.** Physicochemical parameters of whey cheese samples. Average values and standard deviation ( $\pm$ ).

DRY MATTER			
Storage time (days)	C	LA5	LA5FQ4
1	16.83 $\pm$ 0.36 a,A	19.50 $\pm$ 0.77 a,B	18.82 $\pm$ 0.28 a,b,B
7	18.66 $\pm$ 0.59 b,A	19.90 $\pm$ 0.25 a,B	20.61 $\pm$ 0.34 b,B
14	19.23 $\pm$ 0.33 b,A	21.46 $\pm$ 3.10 a,A	20.04 $\pm$ 1.82 a,b,A
21	18.11 $\pm$ 0.36 b,A	19.44 $\pm$ 0.43 a,B	19.25 $\pm$ 0.52 a,b,B
28	16.07 $\pm$ 0.51 a,A	19.04 $\pm$ 1.42 a,B	18.10 $\pm$ 0.71 a,A,B
aw			
Storage time (days)	C	LA5	LA5FQ4
1	0.934 $\pm$ 0.00 a,A	0.936 $\pm$ 0.00 a,b,A	0.943 $\pm$ 0.00 b,c,B
7	0.937 $\pm$ 0.00 c,A	0.944 $\pm$ 0.00 c,A,B	0.946 $\pm$ 0.00 c,B
14	0.938 $\pm$ 0.00 c,A	0.939 $\pm$ 0.00 b,c,A	0.940 $\pm$ 0.00 b,A
21	0.937 $\pm$ 0.00 b,c,A	0.938 $\pm$ 0.00 b,c,A	0.939 $\pm$ 0.00 b,A
28	0.935 $\pm$ 0.00 a,b,B	0.932 $\pm$ 0.00 a,A	0.933 $\pm$ 0.00 a,A
pH			
Storage time (days)	C	LA5	LA5FQ4
1	6.67 $\pm$ 0.06 b,C	5.27 $\pm$ 0.06 a,b,A	5.80 $\pm$ 0.10 d,B
7	6.63 $\pm$ 0.06 b,B	5.37 $\pm$ 0.06 b,c,A	5.43 $\pm$ 0.06 a,b,A
14	6.93 $\pm$ 0.06 c,C	5.47 $\pm$ 0.06 c,A	5.67 $\pm$ 0.06 c,d,B
21	6.53 $\pm$ 0.15 b,B	5.27 $\pm$ 0.06 b,A	5.23 $\pm$ 0.06 a,b,A
28	6.17 $\pm$ 0.12 a,C	5.07 $\pm$ 0.06 a,A	5.47 $\pm$ 0.12 b,c,B
TITRATABLE ACIDITY			
Storage time (days)	C	LA5	LA5FQ4
1	0.035 $\pm$ 0.01 a,A	0.208 $\pm$ 0.01 a,C	0.164 $\pm$ 0.01 a,B
7	0.089 $\pm$ 0.00 b,A	0.431 $\pm$ 0.01 c,C	0.399 $\pm$ 0.01 d,B
14	0.100 $\pm$ 0.01 b,A	0.570 $\pm$ 0.02 d,C	0.246 $\pm$ 0.02 b,B
21	0.101 $\pm$ 0.00 b,A	0.378 $\pm$ 0.00 b,C	0.261 $\pm$ 0.01 b,B
28	0.176 $\pm$ 0.01 c,A	0.451 $\pm$ 0.01 c,C	0.332 $\pm$ 0.02 c,B

Different superscript letters (a,b,c,d) indicate differences for the same product in different ripening days. Superscript capital letters (A,B,C) indicate differences between products at the same ripening day.

**Table S2.** CIEL\*a\*b\* parameters of whey cheese samples. Average values and standard deviation ( $\pm$ ).

L*			
Storage time (days)	C	LA5	LA5FQ4
1	86.90 $\pm$ 1.49 a,b,B	87.23 $\pm$ 1.79 a,B	82.00 $\pm$ 0.35 a,A
7	82.17 $\pm$ 2.07 a,A	87.10 $\pm$ 3.20 a,A,B	91.17 $\pm$ 3.20 b,B
14	83.90 $\pm$ 3.56 a,b,A	87.00 $\pm$ 2.76 a,A	87.13 $\pm$ 2.37 a,b,A
21	88.00 $\pm$ 2.82 a,b,A	86.70 $\pm$ 0.61 a,A	87.90 $\pm$ 2.51 a,b,A
28	89.83 $\pm$ 0.51 b,B	90.43 $\pm$ 1.85 a,B	84.23 $\pm$ 2.29 a,A
a*			
Storage time (days)	C	LA5	LA5FQ4
1	-3.43 $\pm$ 0.21 a,B	-2.57 $\pm$ 0.23 a,A	-2.8 $\pm$ 0.26 a,A

7	-3.07 ± 0.32 <sub>a,A</sub>	-3.50 ± 0.40 <sub>b,c,A</sub>	-2.93 ± 0.06 <sub>a,A</sub>
14	-3.20 ± 0.62 <sub>a,A</sub>	-3.77 ± 0.15 <sub>c,A</sub>	-3.13 ± 0.31 <sub>a,A</sub>
21	-2.43 ± 0.06 <sub>a,A</sub>	-2.57 ± 0.45 <sub>a,A</sub>	-2.70 ± 0.17 <sub>a,A</sub>
28	-2.70 ± 0.40 <sub>a,A</sub>	-2.63 ± 0.32 <sub>a,b,A</sub>	-3.10 ± 0.17 <sub>a,A</sub>
b*			
Storage time (days)	C	LA5	LA5FQ4
1	6.27 ± 0.55 <sub>a,A</sub>	5.80 ± 0.20 <sub>a,A</sub>	6.53 ± 1.17 <sub>a,A</sub>
7	7.83 ± 0.06 <sub>a,A,B</sub>	8.87 ± 0.80 <sub>c,B</sub>	7.50 ± 0.40 <sub>a,A</sub>
14	8.13 ± 1.95 <sub>a,A</sub>	8.80 ± 0.30 <sub>c,A</sub>	6.87 ± 0.45 <sub>a,A</sub>
21	6.77 ± 0.29 <sub>a,A</sub>	6.97 ± 0.51 <sub>a,b,A</sub>	6.77 ± 0.64 <sub>a,A</sub>
28	6.17 ± 0.15 <sub>a,A</sub>	7.30 ± 0.26 <sub>b,B</sub>	7.40 ± 0.52 <sub>a,B</sub>

Different superscript letters (a,b,c) indicate differences for the same product in different ripening days. Superscript capital letters (A,B) indicate differences between products at the same ripening day.

**Table S3.** Microbiological counts of whey cheese samples. Average values and standard deviation (±).

LACTOCOCCUS			
Storage time (days)	C	LA5	LA5FQ4
1	6.46 ± 0.14 <sub>a,A</sub>	8.18 ± 0.10 <sub>a,B</sub>	8.81 ± 0.03 <sub>b,C</sub>
7	7.90 ± 0.03 <sub>b,A</sub>	8.53 ± 0.21 <sub>a,B</sub>	8.08 ± 0.11 <sub>a,A</sub>
14	8.51 ± 0.34 <sub>c,A</sub>	9.47 ± 0.12 <sub>b,B</sub>	9.33 ± 0.18 <sub>c,B</sub>
21	8.71 ± 0.16 <sub>c,A</sub>	8.80 ± 0.03 <sub>a,A</sub>	9.21 ± 0.01 <sub>c,B</sub>
28	8.32 ± 0.31 <sub>b,c,A</sub>	8.21 ± 0.39 <sub>a,A</sub>	9.06 ± 0.06 <sub>b,c,B</sub>
LACTOBACILLUS			
Storage time (days)	C	LA5	LA5FQ4
1	5.49 ± 0.02 <sub>a,A</sub>	8.27 ± 0.08 <sub>a,B</sub>	8.89 ± 0.01 <sub>b,C</sub>
7	5.96 ± 0.20 <sub>a,A</sub>	8.33 ± 0.21 <sub>a,B</sub>	8.21 ± 0.26 <sub>a,B</sub>
14	7.03 ± 0.38 <sub>b,A</sub>	9.36 ± 0.20 <sub>b,B</sub>	9.19 ± 0.04 <sub>b,B</sub>
21	7.23 ± 0.53 <sub>b,A</sub>	8.44 ± 0.33 <sub>a,B</sub>	9.19 ± 0.09 <sub>b,C</sub>
28	8.43 ± 0.62 <sub>d,A</sub>	8.48 ± 0.25 <sub>a,A</sub>	9.18 ± 0.07 <sub>b,B</sub>
YEASTS AND MOULDS			
Storage time (days)	C	LA5	LA5FQ4
1	4.75 ± 0.35 <sub>a,A</sub>	5.74 ± 0.25 <sub>a,B</sub>	5.27 ± 0.24 <sub>a,b,A,B</sub>
7	4.10 ± 0.20 <sub>a,A</sub>	5.93 ± 0.40 <sub>a,B</sub>	5.73 ± 0.51 <sub>a,b,B</sub>
14	6.61 ± 0.44 <sub>b,c,A</sub>	6.24 ± 0.95 <sub>a,A</sub>	6.27 ± 0.25 <sub>b,A</sub>
21	7.46 ± 0.14 <sub>c,B</sub>	5.65 ± 0.27 <sub>a,A</sub>	5.02 ± 1.04 <sub>a,A</sub>
28	6.48 ± 0.37 <sub>b,B</sub>	6.72 ± 0.34 <sub>a,B</sub>	5.74 ± 0.30 <sub>a,b,A</sub>

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