

Figure S1. Boxplots summarizing [A] the total number of observed operational taxonomic units (OTUs) and [B] the Shannon Diversity Index of cheeses investigated in this study, as measured by 16S rRNA gene targeted amplicon sequencing. Cheese samples are coloured based on milk treatment.

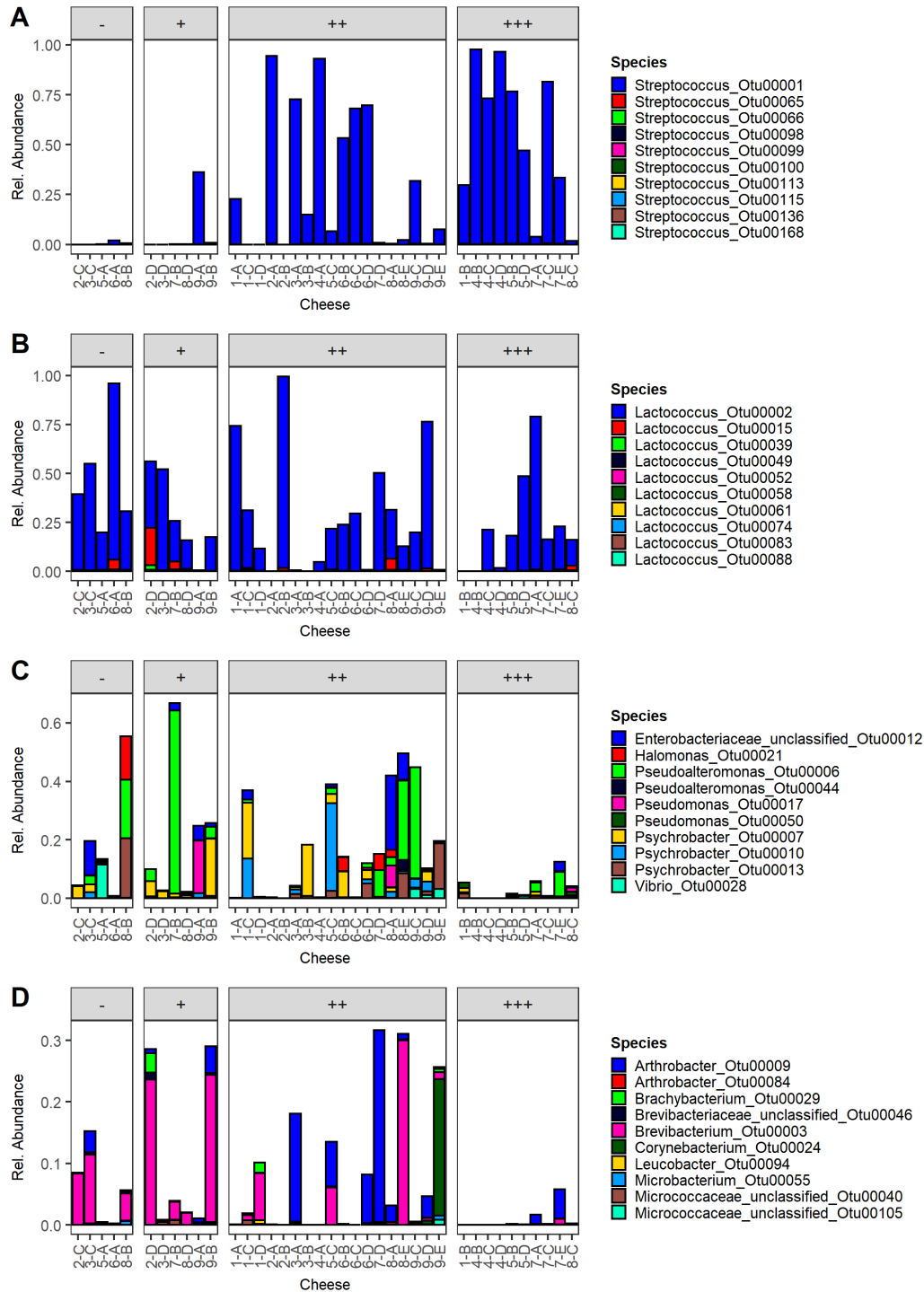


Figure S2. Relative abundances of OTUs of the genera *Streptococcus* (A) and *Lactococcus* (B), and well as the *Proteobacteria* (C) and *Actinobacteria* (D) phyla. Cheeses are grouped by growth category.

Table S1. Milk treatment, origin, growth category of the cheeses used in this study. Also shown are the cheese samples that were include for organic acid analysis, 16S rRNA gene targeted amplicon sequencing (16S), and shotgun metagenomic sequencing (SMS).

Cheese	Milk	Origin	Rind	Growth ^a	Organic Acid	16S	SMS
1-A	Pasteurized	Canada	Bloomy	++		X	
1-B	Pasteurized	France	Washed	+++		X	
1-C	Raw	France	Bloomy	++		X	
1-D	Raw	Canada	Bloomy	++		X	
2-A	Pasteurized	France	Bloomy	++		X	
2-B	Pasteurized	France	Bloomy	++		X	
2-C	Raw	France	Bloomy	-		X	
2-D	Raw	France	Bloomy	+		X	
3-A	Pasteurized	France	Bloomy	++		X	
3-B	Pasteurized	France	Washed	++		X	
3-C	Raw	France	Bloomy	-		X	
3-D	Raw	France	Bloomy	+		X	
4-A	Pasteurized	France	Bloomy	++		X	
4-B	Pasteurized	Europe (not France)	Bloomy	+++		X	
4-C	Pasteurized	Canada	Bloomy	+++		X	
4-D	Pasteurized	Canada	Bloomy	+++		X	
5-A	Pasteurized	France	Bloomy	-		X	X
5-B	Pasteurized	Canada	Bloomy	+++		X	
5-C	Pasteurized	France	Washed	++		X	X
5-D	Pasteurized	Canada	Bloomy	+++		X	X
6-A	Pasteurized	France	Bloomy	-	X	X	X
6-B	Pasteurized	Canada	Bloomy	++		X	
6-C	Pasteurized	Canada	Bloomy	++	X	X	
6-D	Pasteurized	France	Bloomy	++	X	X	
7-A	Thermized	France	Bloomy	+++		X	
7-B	Pasteurized	France	Bloomy	+		X	
7-C	Pasteurized	Canada	Bloomy	+++		X	
7-D	Pasteurized	Canada	Bloomy	++	X	X	X
7-E	Pasteurized	Europe (not France)	Bloomy	+++	X	X	X
8-A	Pasteurized	France	Bloomy	++		X	X
8-B	Pasteurized	Canada	Washed	-		X	X
8-C	Pasteurized	France	Bloomy	+++		X	X
8-D	Raw	France	Bloomy	+		X	X
8-E	Pasteurized	France	Washed	++		X	X
9-A	Raw	France	Washed	+		X	X
9-B	Raw	France	Bloomy	+		X	X
9-C	Pasteurized	Canada	Bloomy	++		X	X
9-D	Pasteurized	France	Bloomy	++	X	X	
9-E	Raw	France	Washed	++		X	X
10-A	Pasteurized	France	Bloomy	+	X		
10-B	Pasteurized	France	Bloomy	++	X		
10-C	Raw	France	Bloomy	-			
10-D	Raw	France	Bloomy	++	X		

Growth categories were based on total increase of *L. monocytogenes* 12 days and were defined as no growth (<1 log CFU

increase; “-”), low growth (1 log – 2 log CFU increase; “+”), medium growth (2 log – 3.5 log CFU increase; “++”), and high growth (> 3.5 log CFU increase; “+++”).