



Figure S1. COG categories of coding proteins. The X-axis represents the functional classes, and the Y-axis represents the number of predicted proteins in *T. thermophilus* N-1.

Table S1 The complete genome sequences of *T. thermophilus* N-1, *Lactobacillus plantarum* 10CH, *Lactococcus lactis* SD96, *Streptococcus thermophilus* NCTC 12958, *Leuconostoc mesenteroides* DSM 20484, *Lactobacillus paracasei* NJ and *Lactobacillus fermentum* MTCC 25067, and the main functional genes involved in fermentation.

	<i>T. thermophilus</i> N-1	<i>Lactobacillus plantarum</i> 10CH	<i>Lactococcus lactis</i> SD96	<i>Streptococcus thermophilus</i> NCTC 12958	<i>Leuconostoc mesenteroides</i> DSM20484	<i>Lactobacillus paracasei</i> NJ	<i>Lactobacillus fermentum</i> MTCC 25067
Source	cheese	cheese	cheese	milk	cheese	yoghourt	fermented milk
Accession number	CP082323- CP082325	CP023728	CP043518-CP043528	LS483339	CP012009-CP012010	CP041944	AP017973-AP017974
Genome size	2.19	3.31	2.64	2.1	1.85	3.08	2.01
G+C content	69.72	44.5	35.3	39	38	46.4	51.1
β -galactosidase	+	+	+	+	+	-	+
glucokinase	+	+	+	+	+	+	+
L-lactate dehydrogenase	+	+	+	+	+	+	+
acetolactate synthase	+	+	+	+	+	+	+
2-oxoglutarate/2- oxoacid ferredoxin oxidoreductase	+	+	+	+	+	+	+
acetaldehyde dehydrogenase	+	+	+	-	+	+	+
acetyl-CoA synthetase	+	-	-	-	-	-	-
acetyl-CoA carboxylase/biotin carboxylase	+	+	+	+	+	+	+
enoyl-CoA hydratase	+	-	-	-	-	-	-
acyl-CoA dehydrogenase	+	+	-	-	+	-	-