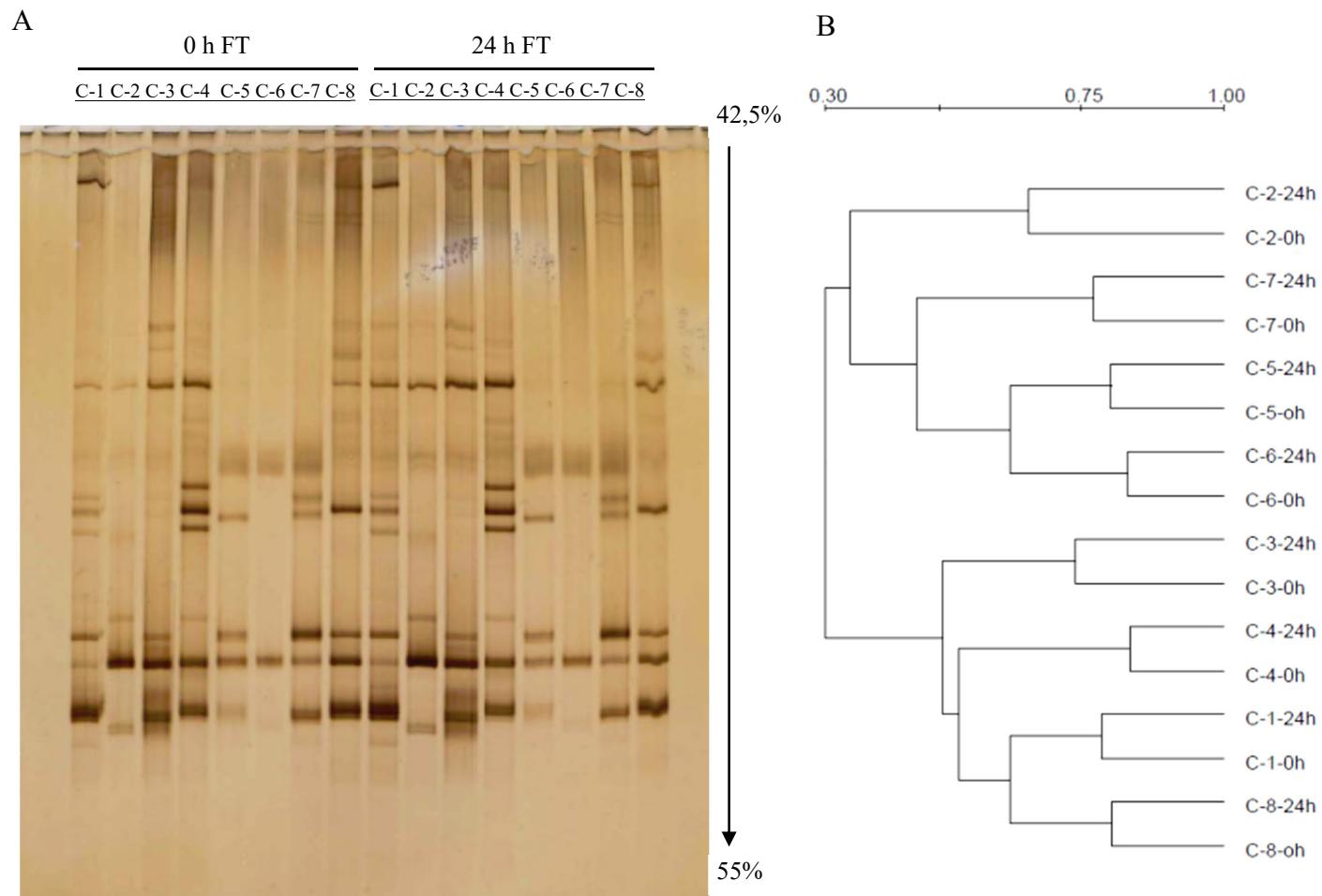


*Supplemental Figure 1. A) DGGE profiles and B) dendrogram of the *Bifidobacterium* population from faecal samples from eight infants*



Faecal control samples from infants at 0 and 24 h of fermentation. Cluster analysis of DGGE pattern profiles was performed using the Dice similarity coefficient and the unweighted-pair group method by means of arithmetic average clustering algorithm (UPGMA). Vertical arrow shows the direction and concentration of the denaturing gradient.

**Supplemental Table 1.**  $\beta$ -GOS composition after purification by size-exclusion chromatography (SEC)

<b><math>\beta</math>-GOS purified by SEC</b>	
<b>Structures</b>	<b>% (w/w)</b>
$\beta$ -Gal-(1-4)- $\beta$ -Gal-(1-4)-Glc	15.8
$\beta$ -Gal-(1-6)- $\beta$ -Gal-(1-4)-Glc	5.3
$\beta$ -Gal-(1-4)- $\beta$ -Gal-(1-6)-Glc	3.2
$\beta$ -Gal-(1-4)- $\beta$ -Gal-(1-2)-Glc	3.2
$\beta$ -Gal-(1-6)- $\beta$ -Gal-(1-2)-Glc	1.8
Unknown DP3	5.9
DP4 + DP5 + DP6	64.8

**Supplemental Table 2.** PCR primers based on 16S rRNA sequences used for quantitative PCR for bacterial groups.

<i>Target bacterial group</i>	<i>Primer</i>	<i>Oligonucleotide Sequence (5'-3')</i>	<i>PCR product size (bp)</i>	<i>Annealing Temp (°C)</i>	<i>References</i>
<i>All bacteria</i>	F-Eub 338 R-Eub 518	ACTCCTACGGGAGGCAGCAG ATTACCGCGGCTGCTGG	200	60	Guo <i>et al.</i> (2008)
<i>Bacteroides</i>	F-AllBac 296 R-AllBac 412	GAGAGGAAGGTCCCCAC CGCTACTTGGCTGGTTAG	106	60	Layton <i>et al.</i> (2006)
<i>Bifidobacteria</i>	F-Bifido R-Bifido	CGCGTCYGGTGTGAAAG CCCCACATCCAGCATCCA	244	60	Delroisse <i>et al.</i> (2008)
<i>Clostridium coccoides / Eubacterium rectale group</i>	F-g-Ccoc R-g-Ccoc	AAATGACGGTACCTGACTAA CTTGAGTTTCATTCTGCGAA	440	50	Matsuki <i>et al.</i> (2004a)
<i>Clostridium leptum subgroup</i>	F-sg-Clept R3-sg-Clept	GCACAAGCAGTGGAGT CTTCCTCCGTTTGTCAA	239	50	Matsuki <i>et al.</i> (2004a)
<i>Lactobacilli</i>	F-Lacto R-Lacto	GAGGCAGCAGTAGGGAATCTTC GGCCAGTTACTACCTCTATCCTTCTTC	126	60	Delroisse <i>et al.</i> (2008)
<i>Enterobacteria</i>	F-Ent R-Ent	ATGGCTGTCGTCAGCTCGT CCTACTTCTTGCAACCCACTC	385	60	Castillo <i>et al.</i> (2006)

**Supplemental Table 3.** PCR primers based on 16S rRNA sequences used for quantitative PCR for Bifidobacteria species.

<i>Target bacterial group</i>	<i>Primer</i>	<i>Oligonucleotide Sequence (5'-3')</i>	<i>PCR product size (bp)</i>	<i>Annealing Temp (°C)</i>	<i>References</i>
<i>Bifidobacterium adolescentis</i>	BiADO-1a	CTCCAGTTGGATGCATGTC	279	55	Matsuki <i>et al.</i> (2004b)
	BiADO-2	CGAAGGCTTGCTCCCAGT			
<i>Bifidobacterium bifidum</i>	BiBIF-1	CCACATGATCGCATGTGATTG	278	55	Matsuki <i>et al.</i> (2004b)
	BiBIF-2	CCGAAGGCTTGCTCCAAA			
<i>Bifidobacterium catenulatum/pseudo-catenulatum</i>	BiCATg-1	CGGATGCTCCGACTCCT	285	55	Matsuki <i>et al.</i> (2004b)
	BiCATg-2	CGAAGGCTTGCTCCGAT			
<i>Bifidobacterium infantis</i>	BiINF-1	TTCCAGTTGATCGCATGGTC	828	55	Matsuki <i>et al.</i> (2004b)
	BiINF-2	GGAAACCCCATCTCTGGGAT			
<i>Bifidobacterium longum</i>	BiLON-1	TTCCAGTTGATCGCATGGTC	829	55	Matsuki <i>et al.</i> (2004b)
	BiLON-2	GGGAAGCCGTATCTCTACGA			
<i>Bifidobacterium breve</i>	BiBRE-1	CCGGATGCTCCATCACAC	288	55	Matsuki <i>et al.</i> (2004b)
	BiBRE-2	ACAAAGTGCCTGCTCCCT			
<i>Faecalis prausnitzii</i>	JFF-F-praust-up JFF-F-praust-rp	TTAACACAATAAGTAATCCACCTGG ACCTTCCTCCGTTTGTCAAC	314	60	

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