

Figure 1

Lactulose

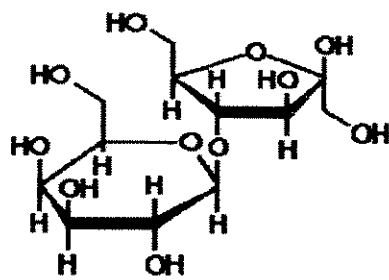


Figure 2

Raffinose

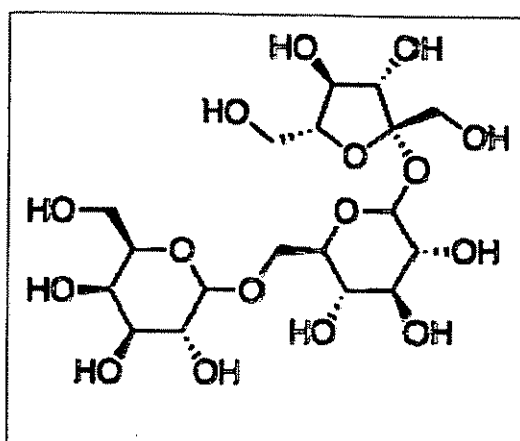


Figure 3

Stachyose

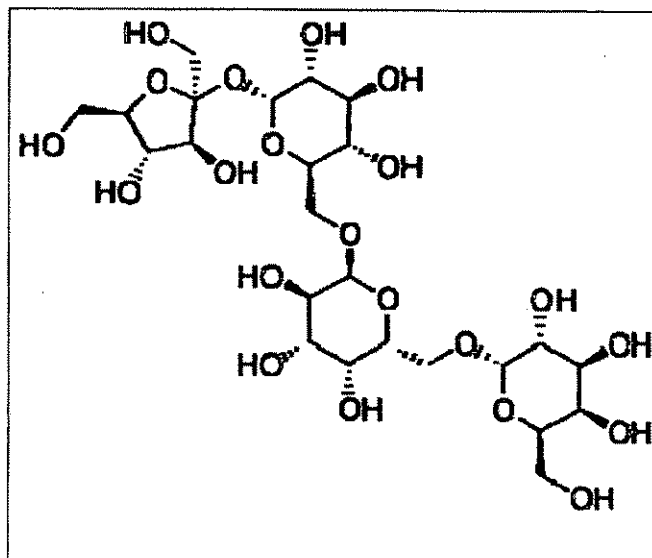


Figure 4

Inulin

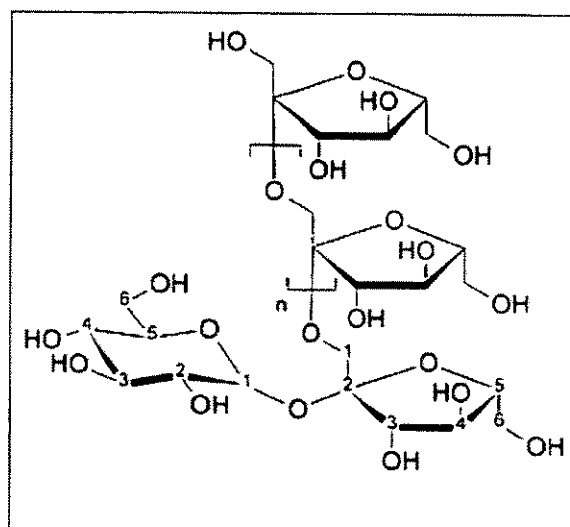


Figure 5

Day	70% GOS (g)	Total weight (g)	Weight GOS (g)
1	0.50	0.50	0.35
2	0.50	0.50	0.35
3	0.50	0.50	0.35
4	1.00	1.00	0.7
5	1.50	1.50	1.05
6	2.00	2.00	1.4
7	2.50	2.50	1.75
8	3.00	3.00	2.1
9	3.50	3.50	2.45
10	4.00	4.00	2.8
11	4.50	4.50	3.15
12	5.00	5.00	3.5
13	5.50	5.50	3.85
14	6.00	6.00	4.2
15	6.50	6.50	4.55
16	7.00	7.00	4.9
17	7.50	7.50	5.25
18	8.00	8.00	5.6
19	8.00	8.00	5.6
20	8.00	8.00	5.6
21	8.00	8.00	5.6
22	8.00	8.00	5.6
23	8.00	8.00	5.6
24	8.00	8.00	5.6
25	8.00	8.00	5.6
26	8.00	8.00	5.6
27	8.00	8.00	5.6
28	8.00	8.00	5.6
29	8.00	8.00	5.6
30	8.00	8.00	5.6
31	8.00	8.00	5.6
32	8.00	8.00	5.6
33	8.00	8.00	5.6
34	8.00	8.00	5.6

Figure 6

Day	70% GOS (g)	Total weight (g)	Weight GOS (g)
1	0.29	0.62	0.21
2	0.29	0.62	0.21
3	0.29	0.62	0.21
4	0.59	1.25	0.41
5	0.88	1.87	0.62
6	1.17	2.50	0.82
7	1.46	3.12	1.03
8	1.76	3.75	1.23
9	2.05	4.37	1.44
10	2.34	4.99	1.64
11	2.64	5.62	1.85
12	2.93	6.24	2.05
13	3.22	6.87	2.26
14	3.52	7.49	2.46
15	3.81	8.11	2.67
16	4.10	8.74	2.87
17	4.39	9.36	3.08
18	4.69	9.99	3.28
19	4.69	9.99	3.28
20	4.69	9.99	3.28
21	4.69	9.99	3.28
22	4.69	9.99	3.28
23	4.69	9.99	3.28
24	4.69	9.99	3.28
25	4.69	9.99	3.28
26	4.69	9.99	3.28
27	4.69	9.99	3.28
28	4.69	9.99	3.28
29	4.69	9.99	3.28
30	4.69	9.99	3.28
31	4.69	9.99	3.28
32	4.69	9.99	3.28
33	4.69	9.99	3.28
34	4.69	9.99	3.28

Figure 7

Day	90% GOS (g)	Total weight (g)	Weight GOS (g)
1	0.42	0.42	0.38
2	0.42	0.42	0.38
3	0.42	0.42	0.38
4	0.84	0.84	0.76
5	1.26	1.26	1.14
6	1.68	1.68	1.52
7	2.11	2.11	1.89
8	2.53	2.53	2.27
9	2.95	2.95	2.65
10	3.37	3.37	3.03
11	3.79	3.79	3.41
12	4.21	4.21	3.79
13	4.63	4.63	4.17
14	5.05	5.05	4.55
15	5.47	5.47	4.93
16	5.89	5.89	5.31
17	6.32	6.32	5.68
18	6.74	6.74	6.06
19	6.74	6.74	6.06
20	6.74	6.74	6.06
21	6.74	6.74	6.06
22	6.74	6.74	6.06
23	6.74	6.74	6.06
24	6.74	6.74	6.06
25	6.74	6.74	6.06
26	6.74	6.74	6.06
27	6.74	6.74	6.06
28	6.74	6.74	6.06
29	6.74	6.74	6.06
30	6.74	6.74	6.06
31	6.74	6.74	6.06
32	6.74	6.74	6.06
33	6.74	6.74	6.06
34	6.74	6.74	6.06

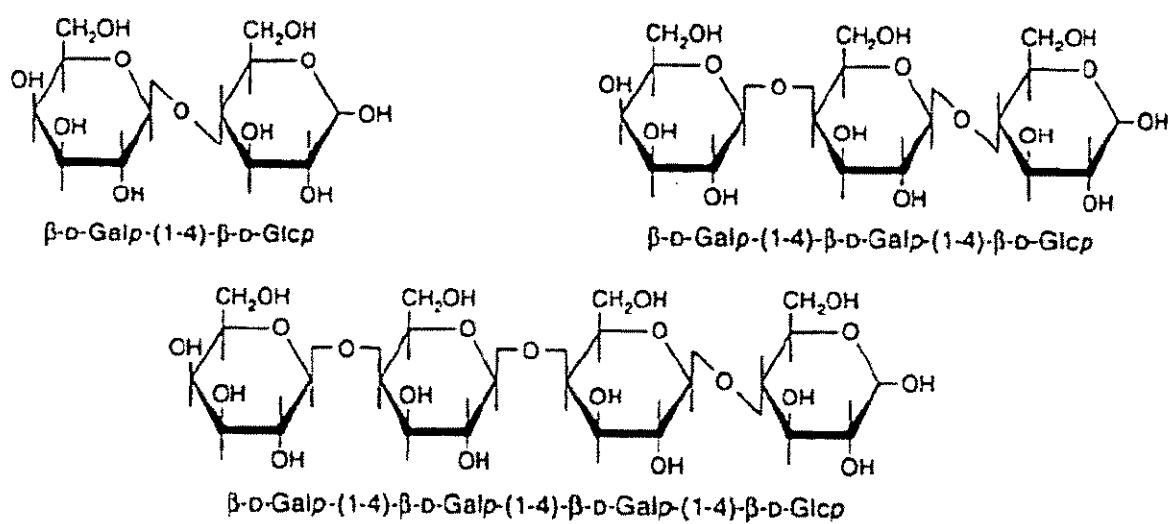
Figure 8

Day	93% GOS (g)	Total weight (g)	Weight GOS (g)
1	0.42	0.42	0.38
2	0.42	0.42	0.38
3	0.42	0.42	0.38
4	0.84	0.84	0.76
5	1.26	1.26	1.14
6	1.68	1.68	1.52
7	2.11	2.11	1.89
8	2.53	2.53	2.27
9	2.95	2.95	2.65
10	3.37	3.37	3.03
11	3.79	3.79	3.41
12	4.21	4.21	3.79
13	4.63	4.63	4.17
14	5.05	5.05	4.55
15	5.47	5.47	4.93
16	5.89	5.89	5.31
17	6.32	6.32	5.68
18	6.74	6.74	6.06
19	6.74	6.74	6.06
20	6.74	6.74	6.06
21	6.74	6.74	6.06
22	6.74	6.74	6.06
23	6.74	6.74	6.06
24	6.74	6.74	6.06
25	6.74	6.74	6.06
26	6.74	6.74	6.06
27	6.74	6.74	6.06
28	6.74	6.74	6.06
29	6.74	6.74	6.06
30	6.74	6.74	6.06
31	6.74	6.74	6.06
32	6.74	6.74	6.06
33	6.74	6.74	6.06
34	6.74	6.74	6.06

Figure 9

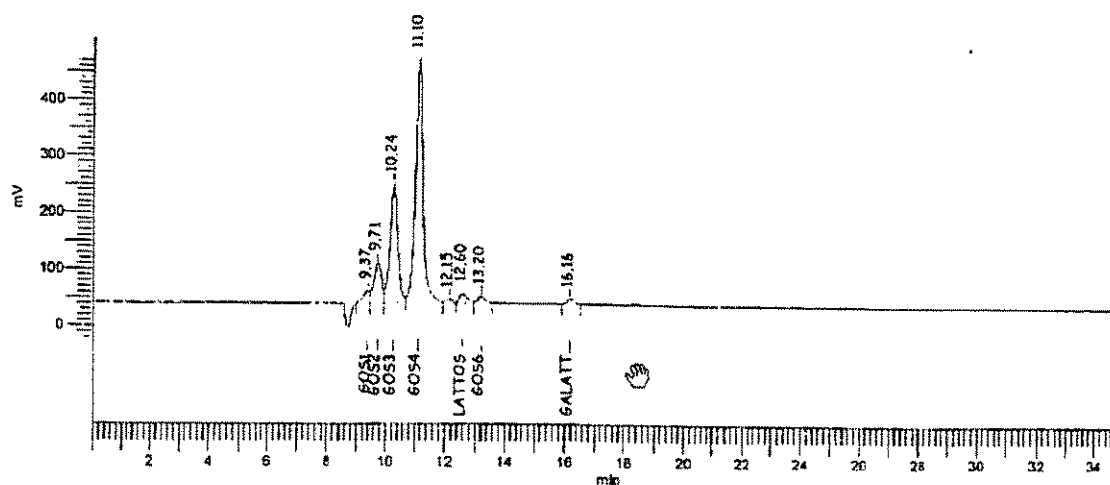
Day	95% GOS (g)	Total weight (g)	Weight GOS (g)
1	0.42	0.42	0.38
2	0.42	0.42	0.38
3	0.42	0.42	0.38
4	0.84	0.84	0.76
5	1.26	1.26	1.14
6	1.68	1.68	1.52
7	2.11	2.11	1.89
8	2.53	2.53	2.27
9	2.95	2.95	2.65
10	3.37	3.37	3.03
11	3.79	3.79	3.41
12	4.21	4.21	3.79
13	4.63	4.63	4.17
14	5.05	5.05	4.55
15	5.47	5.47	4.93
16	5.89	5.89	5.31
17	6.32	6.32	5.68
18	6.74	6.74	6.06
19	6.74	6.74	6.06
20	6.74	6.74	6.06
21	6.74	6.74	6.06
22	6.74	6.74	6.06
23	6.74	6.74	6.06
24	6.74	6.74	6.06
25	6.74	6.74	6.06
26	6.74	6.74	6.06
27	6.74	6.74	6.06
28	6.74	6.74	6.06
29	6.74	6.74	6.06
30	6.74	6.74	6.06
31	6.74	6.74	6.06
32	6.74	6.74	6.06
33	6.74	6.74	6.06
34	6.74	6.74	6.06

Figure 10



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Figure 11



GOS da idrolisi lattosio

N° di analisi: ____/09

Note: carboidrati

Strumento: LC 1

Colonna: Transgenomic ICE SEP ION 300

Eluente: H2SO4 0.015N

Flusso: 0.4ml/min

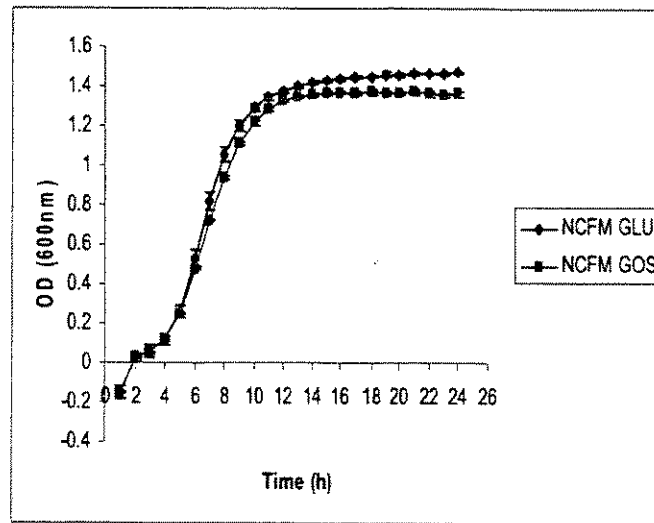
Temperatura: 40°C

Detector: RI SERIE 200

Peak #	Time [min]	Component Name	Conc. %	Area (μV·s)	Response factor	Amount norm. %	Area Norm. (%)
1	9.375	GOS1	1.601037	314941	9.0834e+06	5.3	2.2
2	9.708	GOS2	6.693966	1316773	9.0834e+06	22.3	9.4
3	10.245	GOS3	19.613919	3858262	9.0834e+06	65.3	27.4
4	11.095	GOS4	0.000229	7886229	1.5932e+12	0.0	86.1
5	12.150		4.136e-94	89574	1.000e+100	1e-91	0.6
6	12.599	Lattosio	1.431672	281625	9.0834e+06	4.8	2.0
7	13.200	GOS6	0.000229	191882	1.8764e+10	0.0	1.4
8	16.161	Galattosio	0.695751	129716	8.6091e+06	2.3	0.9
			30.036802	14069002		100.0	100.0

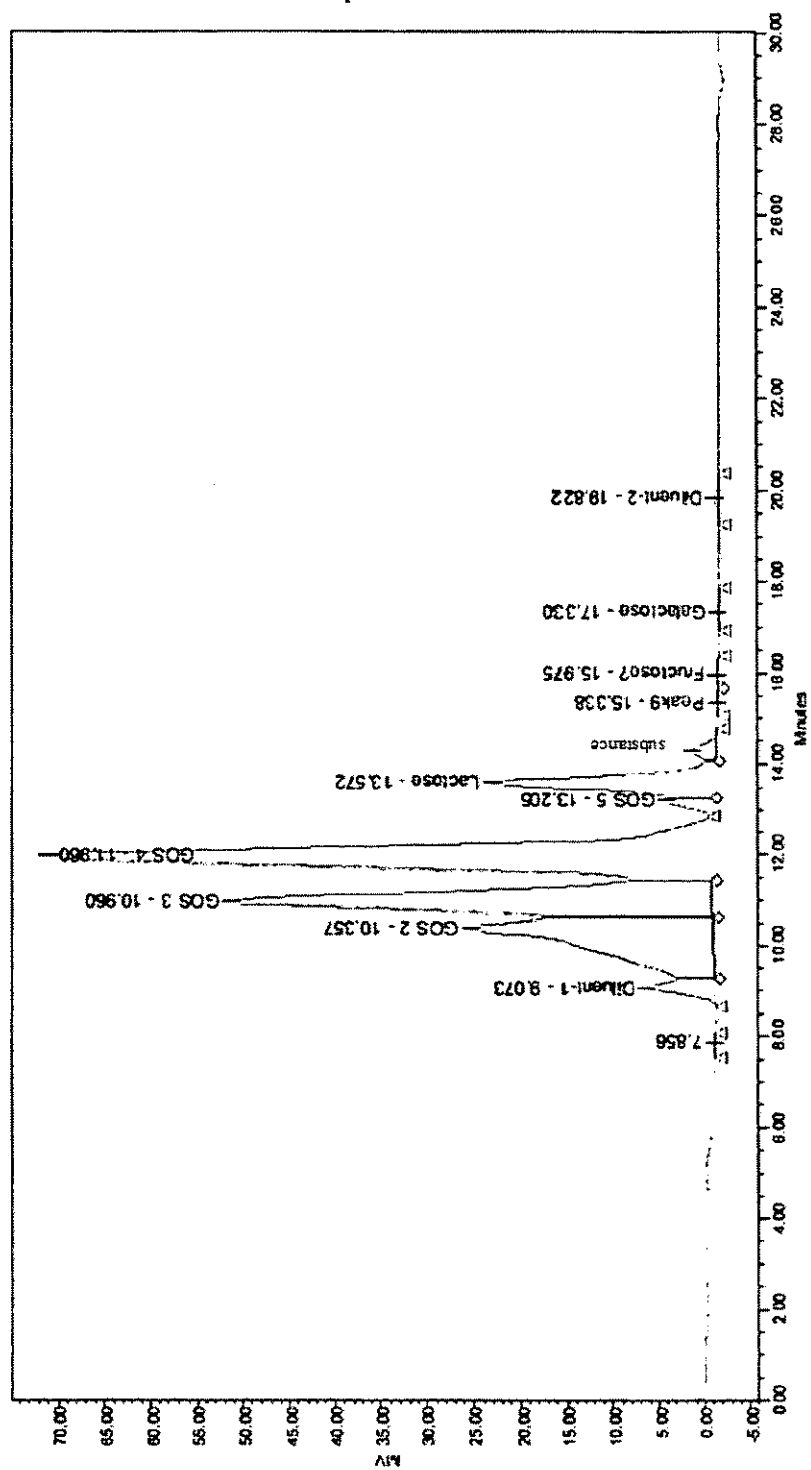
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Figure 12



LACTOBACILLUS acidophilus NCFM on GOS1 (95%) or Glucose

Figure 13 A
Pre-purification



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Figure 13B
Post-purification

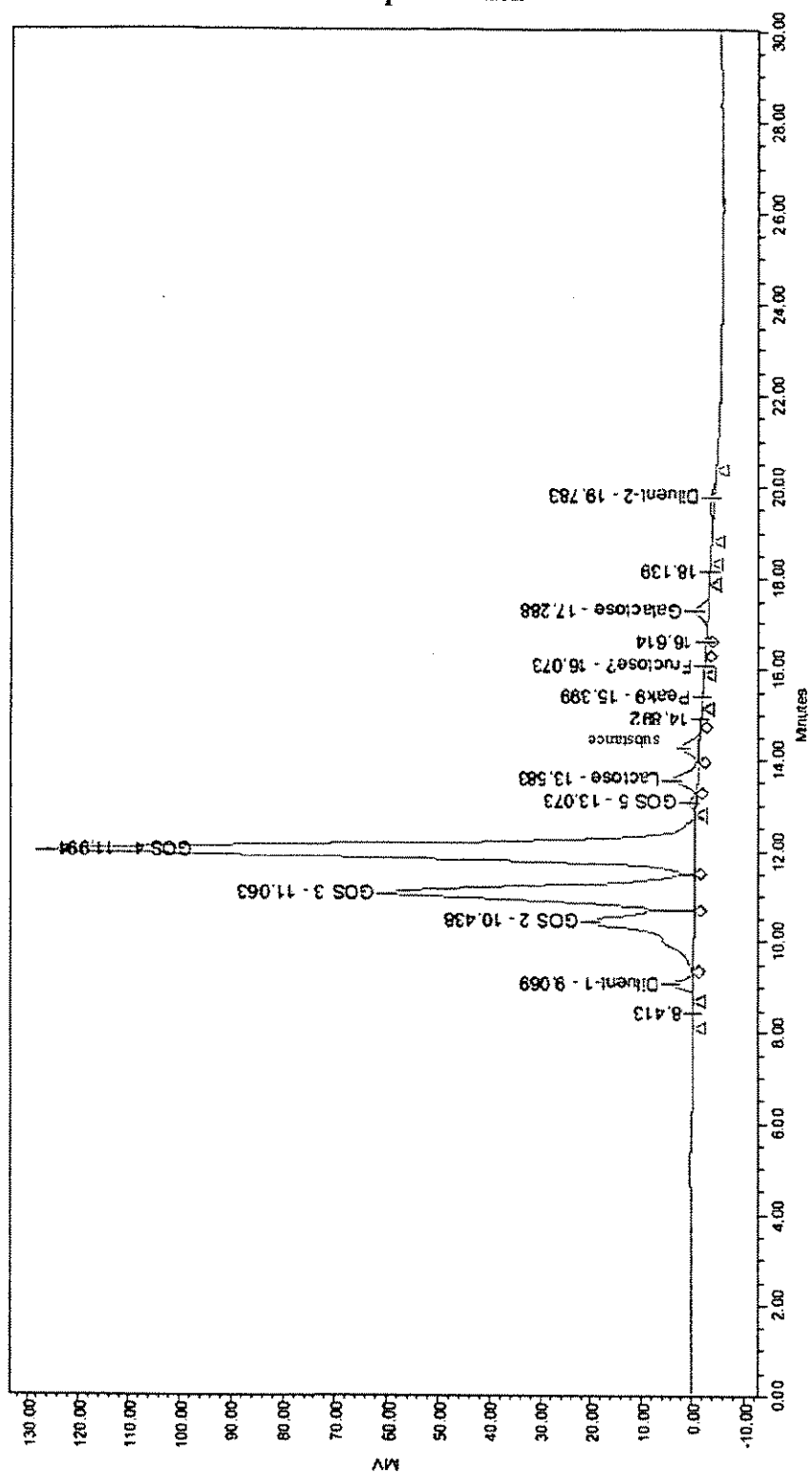


Figure 14

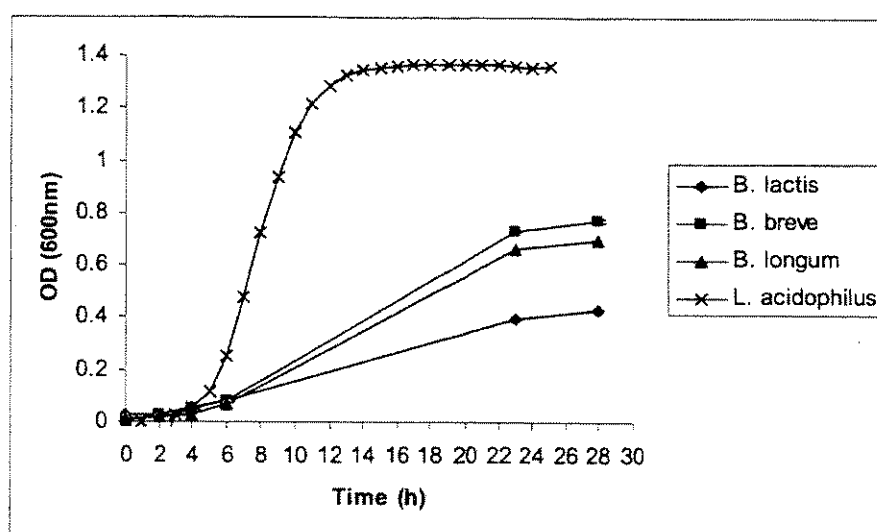


Figure 15

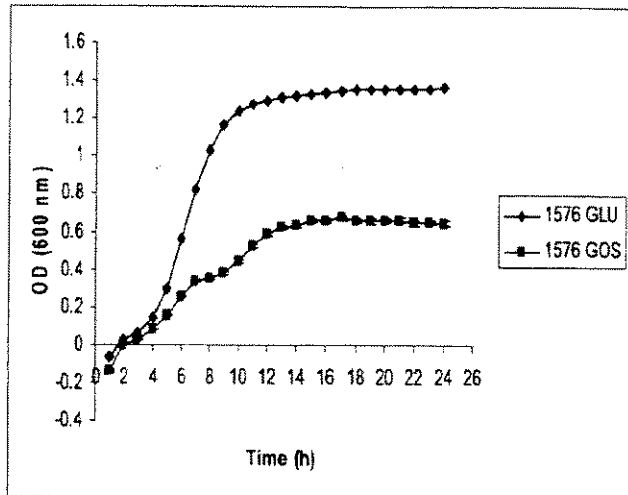
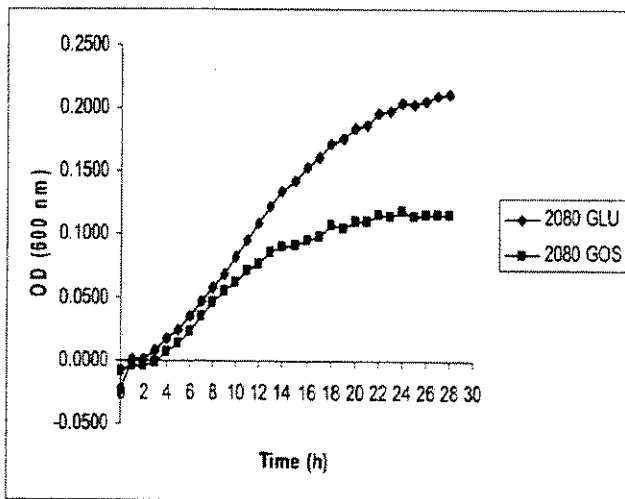
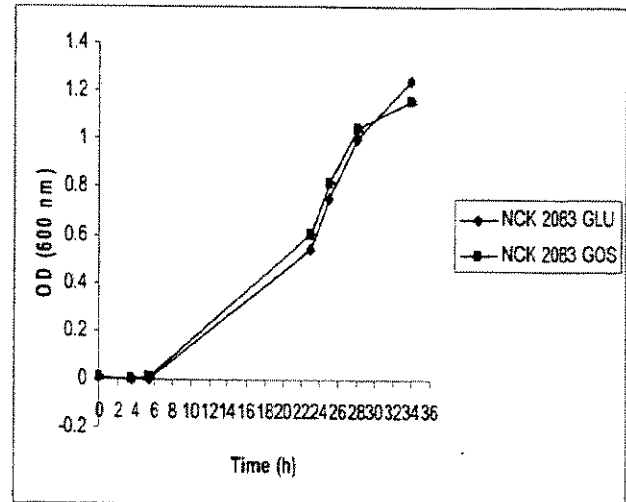
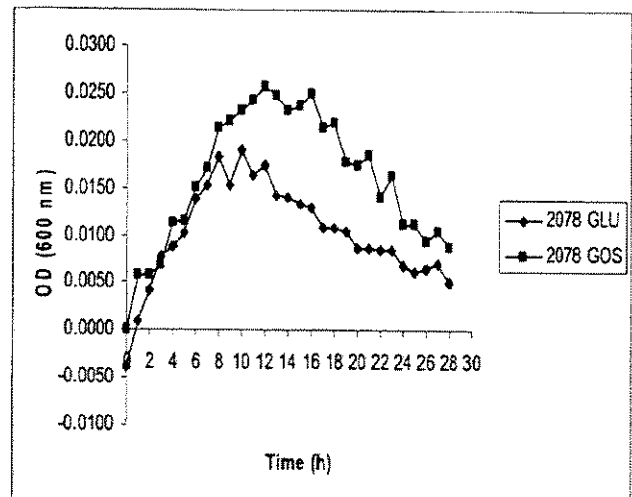
Bifidobacterium longum*Bifidobacterium pseudolongum**Bifidobacterium animalis**Bifidobacterium adolescentis*

Figure 16

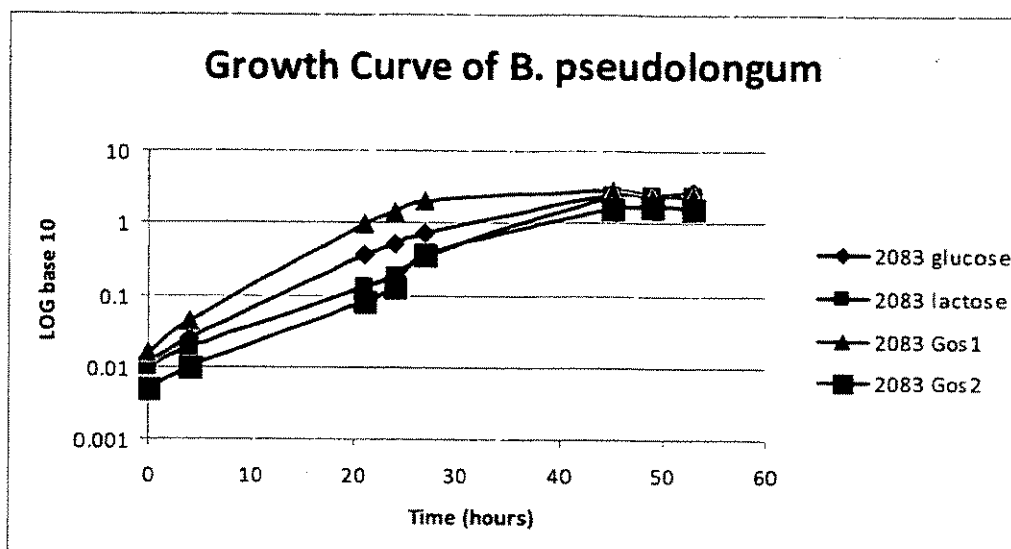


Figure 17

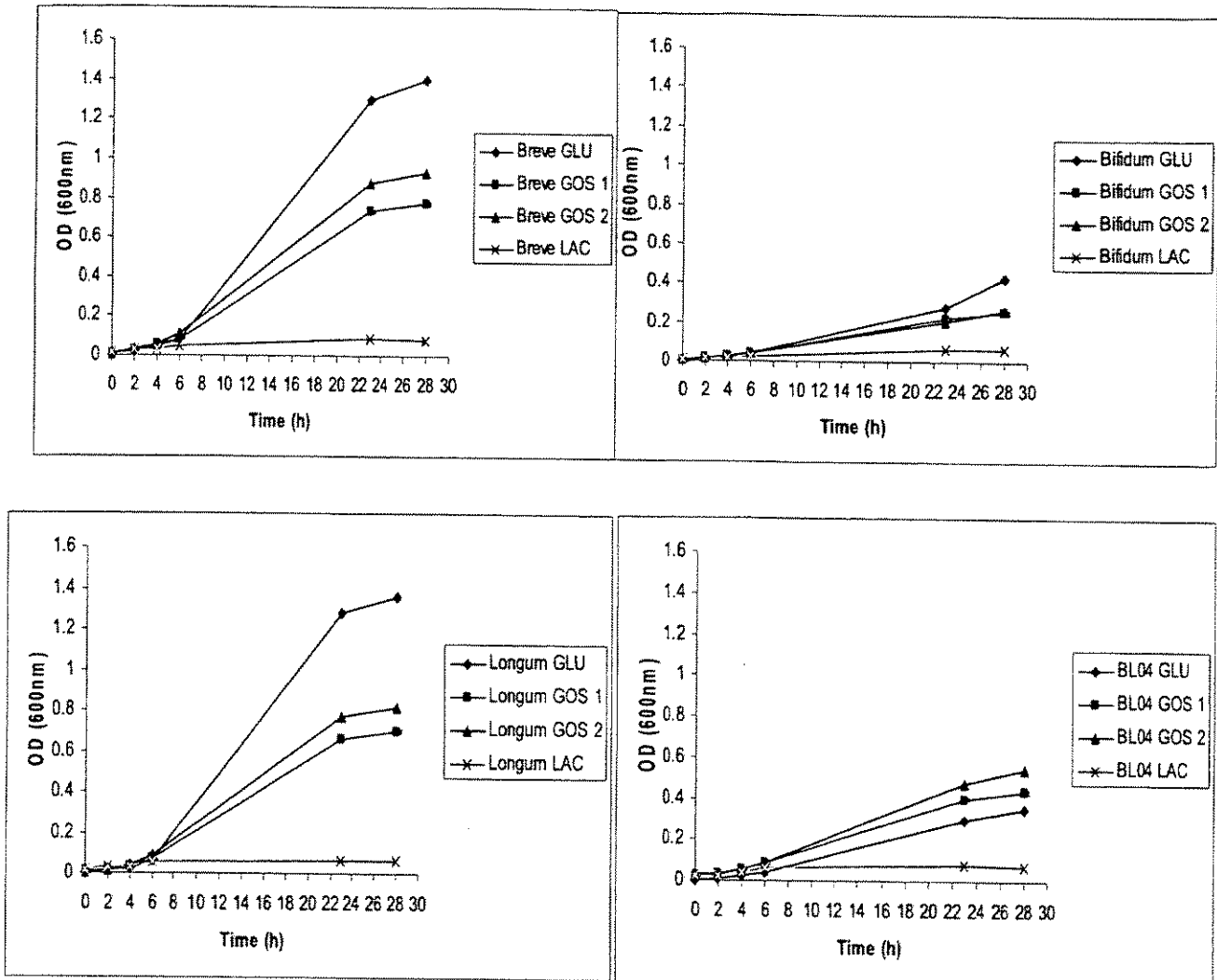


Figure 18

