

## 5. Supplementary Materials

**Table S1.** Changes in the oligosaccharide content of colostrum and milks as a result of days post parturition<sup>a</sup>

Oligosaccharide	Days Post Parturition						<i>p - value</i>					
	Colostrum	Day 1	Day 2	Day 3	Day 4	Day 5	Time	$\eta^2$	Parity	$\eta^2$	Time*Parity	$\eta^2$
<b>3-FL</b>	734 ± 333.94	225.48 ± 63.14	198.66 ± 111.15	206.63 ± 58.18	252.92 ± 64.26	267.08 ± 67.67	<0.001	0.70	0.87	0.03	0.83	0.03
<b>Lactose</b>	23389.65 ± 5022.65	39166.94 ± 2148.75	41481.67 ± 2865.87	42412.78 ± 1882.23	43569.39 ± 1668.97	44169.89 ± 954.1	<0.001	0.92	0.20	0.19	0.88	0.03
<b>LNnT</b>	13.87 ± 7.77	1.44 ± 1.16	1.72 ± 2.64	1.19 ± 0.89	0.31 ± 0.39	0.15 ± 0	<0.001	0.77	0.30	0.16	0.32	0.15
<b>LNnH</b>	62.96 ± 24.47	57.88 ± 20.94	25.92 ± 8.19	20.36 ± 6.48	15 ± 5.18	11.58 ± 2.49	<0.001	0.84	0.27	0.16	0.06	0.26
<b>LNT</b>	0.47 ± 0.32	1.37 ± 0.38	1.95 ± 1.33	1.07 ± 0.29	1.48 ± 0.88	1.07 ± 0.25	<0.001	0.41	1.00	0.00	0.26	0.16
<b>Sialic Acid</b>	32.52 ± 7.34	57.37 ± 12.8	43.12 ± 10.68	30.52 ± 6.2	25.28 ± 6.73	22.16 ± 5.2	<0.001	0.86	0.67	0.05	0.25	0.16
<b>LSTc</b>	147.45 ± 67.65	22.16 ± 13.79	5.76 ± 3.47	2.97 ± 1.9	2.02 ± 1.19	1.74 ± 0.94	<0.001	0.88	0.01	0.45	0.02	0.38
<b>3'-SNL</b>	19.02 ± 8.02	17.21 ± 5.32	7.12 ± 3.41	3.18 ± 1.72	2.65 ± 1.3	2.27 ± 1.27	<0.001	0.83	0.38	0.13	0.20	0.19
<b>6'-SL</b>	113.35 ± 50.46	59.21 ± 22.95	44.79 ± 13.69	43.62 ± 15.3	41 ± 18.4	35.65 ± 17.03	<0.001	0.78	0.00	0.56	0.07	0.28
<b>3'-SL</b>	786.62 ± 252.87	163.01 ± 60.3	85.51 ± 23.84	79.84 ± 25.24	69.32 ± 24.25	63.98 ± 20.94	<0.001	0.91	0.05	0.32	0.21	0.19
<b>DSLNT</b>	121.37 ± 31.92	38.6 ± 18.42	23.63 ± 9.01	8.7 ± 6.45	7.82 ± 7.1	7.76 ± 5.65	<0.001	0.95	0.08	0.30	0.07	0.27
<b>DSL</b>	520.02 ± 142.18	66.54 ± 25.05	38.35 ± 19.55	37.63 ± 16.34	29.44 ± 15.14	38.93 ± 9.71	<0.001	0.93	0.34	0.14	0.35	0.13

<sup>a</sup>Values are the mean ± standard deviation (mg/L); in total 108 samples were obtained and analysed.  $\eta^2$  partial eta<sup>2</sup> effect size where effect sizes are small ( $0.01 \leq \eta^2 < 0.06$ ), medium ( $0.06 \leq \eta^2 < 0.14$ ), and large ( $\eta^2 \geq 0.14$ ).