Supplementary Table S2 The composition and their peak area of OS only identified in feces of four women's babies

Composition	RT (min)	Mass		Ion	Peak area ($\times 10^6$)			
		Found	Cal		F1	F2	F3	F4
Hex1HexNAc1dHex1	19.649	547.2112	547.2112	H-	0	0	42.384	0
Hex1HexNAc1dHex1	21.385	547.2112	547.2112	H-	0	0	84.675	0
Hex1HexNAc1dHex1	22.756	547.2112	547.2112	H-	0	0	58.600	0
Hex2HexNAc1	23.202	563.2061	563.20619	H-	0	0	14.816	0
Hex2Neu5Ac1	13.612	651.2221	651.22118	H+	0	0	6.580	0
Hex1HexNAc1Neu5Ac1	31.704	674.2381	674.24043	H-	0	232.227	0	0
Hex1HexNAc1Neu5Ac1	32.65	674.2381	674.23906	H+	0	239.684	0	244.460
Hex1HexNAc1Neu5Ac1	33.592	674.2381	674.23625	H+	0	147.452	0	0
Hex1HexNAc1dHex2	31.17	675.2585	675.25807	H+	0	0	0	272.790
Hex1HexNAc1dHex2	32.523	675.2585	675.25817	H+	0	0	0	7.035
Hex1HexNAc1dHex2	34.535	675.2585	675.25568	H+	38.937	0	0	0
Hex1HexNAc1dHex2	37.447	675.2585	675.25565	H+	0	0	832.727	0
Hex1HexNAc1Neu5Ac1	2.27	692.2487	692.25136	H-	21.914	0	0	0
Hex2HexNAc1dHex1	29.642	709.264	709.26448	H-	0	0	12.691	0
Hex2HexNAc1dHex1	30.116	709.264	709.26448	H-	0	0	14.131	0
Hex1HexNAc2dHex1	40.655	732.28	732.27949	H-	0	9.875	0	0
Hex2HexNAc2	37.259	748.2749	748.27496	H-	0	449.043	80.571	149.341
Hex2HexNAc2	40.169	748.2749	748.27416	H+	0	0	9.944	0
Hex2dHex3	34.895	780.2898	780.28661	H+	0	0	0	9.008
Hex2dHex3	37.993	780.2898	780.28833	H-	6.389	0	0	237.661
Hex2dHex3	39.3	780.2898	780.28679	H+	7.297	0	0	0
Hex1HexNAc3	33.303	789.3015	789.30232	H-	0	0	0	19.283
Hex1HexNAc3	34.913	789.3015	789.30177	H-	0	0	0	49.435

Hex3Neu5Ac1	40.148	795.2643	795.26426	H-	0	72.415	0	90.911
Hex2Neu5Ac1dHex1	25.732	797.28	797.28108	H-	0	0	0	29.004
Hex2Neu5Ac1dHex1	30.144	797.28	797.28177	H-	0	131.385	0	265.206
Hex2Neu5Ac1dHex1	38.3	797.28	797.28065	H-	0	0	0	21.183
Hex2HexNAc1Neu5Ac1	39.401	836.2909	836.29242	H-	0	279.781	0	203.853
Hex2HexNAc1Neu5Ac1	42.204	836.2909	836.28863	H+	0	21.845	0	0
Hex1HexNAc1Neu5Ac1dHex1	26.481	838.3066	838.30702	H-	0	0	0	10.764
Hex1HexNAc1Neu5Gc1dHex1	30.096	854.3015	854.30214	H-	0	0	11.314	0
Hex2HexNAc1Neu5Gc1	41.038	870.2964	870.29595	H+	0	0	0	20.073
Hex2HexNAc2dHex1	26.486	894.3328	894.33284	H-	0	18.209	0	0
Hex2HexNAc2dHex1	40.203	894.3328	894.33231	H+	0	107.398	0	0
Hex2HexNAc2dHex1	41.602	894.3328	894.33336	H-	0	96.156	0	10.063
Hex2Neu5Ac2	36.372	942.3175	942.31996	H-	0	0	0	16.821
Hex2HexNAc3	39.239	951.3543	951.35124	H+	0	0	151.148	0
Hex4dHex2	30.134	958.3375	958.33569	H+	0	0	0	31.443
Hex4dHex2	40.224	958.3375	958.33601	H-	0	8.792	0	0
Hex1HexNAc1Neu5Ac1Neu5Gc1	41.321	981.3284	981.33165	H+	0	13.039	0	0
Hex1HexNAc1Neu5Ac1Neu5Gc1	44.94	999.339	999.3449	H+	0	11.839	0	0
Hex3HexNAc1dHex2	28.106	1017.3747	1017.37471	H-	0	13.587	0	0
Hex5HexNAc1	45.438	1031.3539	1031.3492	H-	0	41.673	0	0
Hex4HexNAc1dHex1	29.619	1033.3696	1033.37019	H-	0	41.267	0	0
Hex2HexNAc2Neu5Ac1	40.348	1039.3702	1039.37153	H-	0	9.908	0	0
Hex2HexNAc2dHex2	42.926	1040.3907	1040.39183	H-	0	0	0	25.700
Hex2HexNAc2dHex2	40.974	1040.3905	1040.38997	H-	0	0	0	7.838
Hex2HexNAc2Neu5Gc1	44.338	1073.3759	1073.38091	H+	0	7.724	0	0
Hex2HexNAc3dHex1	41.14	1097.4122	1097.40728	H+	0	74.693	0	0

Hex3HexNAc3	41.317	1113.4071	1113.40572	H-	0	41.832	253.399	0
Hex1HexNAc4dHex1	30.703	1138.4388	1138.43205	H+	0	0	86.906	0
Hex4HexNAc1Neu5Ac1	42.361	1160.3965	1160.39656	H-	0	111.273	0	38.745
Hex1HexNAc2Neu5Ac1dHex2	46.343	1169.4333	1169.43547	H+	0	0	0	4.774
Hex5HexNAc1dHex1	42.769	1177.4117	1177.4134	H-	0	12.978	0	0
Hex2HexNAc1Neu5Gc2	42.436	1177.3867	1177.38706	H+	0	0	0	8.715
Hex3HexNAc2Neu5Ac1	42.044	1201.4231	1201.42261	H-	0	614.642	0	415.988
Hex3HexNAc2Neu5Ac1	43.931	1201.4231	1201.42026	H+	0	9.962	0	0
Hex5HexNAc2	43.199	1234.4333	1234.43176	H-	0	0	0	43.321
Hex4Neu5Ac2	43.09	1248.4125	1248.4125	H-	0	5.561	0	0
Hex5HexNAc2	41.942	1252.4439	1252.44522	H-	0	14.348	0	0
Hex3HexNAc3dHex1	42.446	1259.465	1259.46494	H-	0	201.261	0	0
Hex3HexNAc3dHex1	43.621	1259.465	1259.46577	H-	0	14.572	0	0
Hex4HexNAc3	42.521	1275.46	1275.4603	H-	0	425.240	12.218	79.109
Hex3HexNAc2Neu5Ac1dHex1	42.323	1347.481	1347.48026	H-	0	117.933	0	21.534
Hex3HexNAc2Neu5Ac1dHex1	43.287	1347.481	1347.47971	H+	0	15.380	0	0
Hex3HexNAc2dHex3	44.749	1348.5014	1348.50112	H-	0	0	0	15.482
Hex3HexNAc2Neu5Ac1dHex1	44.727	1365.4916	1365.4987	H+	0	0	0	8.856
Hex5HexNAc2dHex1	44.068	1380.4912	1380.49403	H-	0	46.099	0	50.748
Hex2HexNAc3dHex3	20.137	1389.528	1389.52524	H+	0	12.576	0	0
Hex3HexNAc3dHex2	43.479	1405.5229	1405.52117	H+	0	49.125	0	0
Hex3HexNAc3dHex2	44.462	1405.5229	1405.52327	H-	0	9.932	0	0
Hex4HexNAc3dHex1	43.448	1421.5178	1421.51744	H+	0	331.369	0	0
Hex4HexNAc3dHex1	45.518	1421.5178	1421.51255	H+	0	26.423	0	0
Hex4HexNAc1Neu5Ac2	43.246	1451.4919	1451.49198	H-	0	35.218	0	7.800
Hex4HexNAc4	43.148	1478.5393	1478.53904	H-	0	24.043	0	0

Hex4HexNAc4	44.734	1478.5393	1478.53115	H-	0	0	0	8.986
Hex4HexNAc1Neu5Gc2	38.302	1483.4817	1483.48714	H-	0	0	0	9.305
Hex3HexNAc2Neu5Ac2	42.6	1492.5186	1492.52311	H-	0	288.340	0	63.542
Hex3HexNAc2Neu5Ac2	43.852	1492.5186	1492.51865	H+	0	7.319	0	0
Hex3HexNAc2Neu5Ac1dHex2	44.741	1511.5495	1511.55271	H+	0	0	0	34.006
Hex3HexNAc5	42.664	1519.5659	1519.56235	H+	0	0	27.200	0
Hex5HexNAc2Neu5Ac1	43.757	1525.5287	1525.52925	H-	0	16.643	0	12.523
Hex4HexNAc2dHex3	43.281	1528.5648	1528.56028	H+	0	9.588	0	0
Hex2HexNAc3Neu5Ac2	44.896	1533.545	1533.53843	H+	0	0	0	4.951
Hex3HexNAc3Neu5Ac1dHex1	43.4	1550.5604	1550.56631	H-	0	9.443	0	0
Hex4HexNAc3Neu5Ac1	43.263	1566.5553	1566.55179	H-	0	79.536	0	11.540
Hex4HexNAc3Neu5Ac1	44.469	1566.5553	1566.56003	H+	0	86.127	0	0
Hex4HexNAc3dHex2	44.468	1567.5757	1567.57566	H-	0	1048.744	0	10.452
Hex2HexNAc3Neu5Ac1Neu5Gc1	43.26	1567.5507	1567.55791	H+	0	8.426	0	0
Hex4HexNAc3dHex2	44.464	1585.5863	1585.59177	H+	0	68.808	0	0
Hex4HexNAc4dHex1	44.137	1624.5972	1624.59782	H-	0	92.793	0	0
Hex5HexNAc4	44.046	1640.592	1640.59165	H-	0	17.315	0	79.158
Hex3HexNAc2Neu5Ac1dHex3	43.708	1657.6074	1657.59866	H-	0	0	0	11.822
Hex3HexNAc5dHex1	42.564	1665.6238	1665.62033	H+	0	0	7.176	0
Hex4HexNAc5	45.717	1681.6187	1681.61899	H-	0	83.046	0	0
Hex4HexNAc3Neu5Ac1dHex1	44.246	1712.6132	1712.61432	H-	0	53.556	0	0
Hex3HexNAc6	43.045	1722.6453	1722.64072	H+	0	0	9.898	0
Hex6HexNAc3dHex1	44.279	1745.6234	1745.63207	H+	0	13.790	0	11.417
Hex4HexNAc4Neu5Ac1	43.6	1769.6346	1769.63377	H-	0	39.893	0	0
Hex5HexNAc4dHex1	44.814	1786.65	1786.65066	H-	0	406.790	0	37.529
Hex2HexNAc1Neu5Gc4	45.194	1791.5673	1791.56015	H+	0	27.103	0	0

Hex3HexNAc2Neu5Ac1dHex4	44.896	1803.6653	1803.67246	H+	0	50.890	0	0
Hex4HexNAc3Neu5Ac2	43.812	1857.6508	1857.65038	H+	0	50.237	0	0
Hex5HexNAc5	46.052	1861.6821	1861.67715	H-	0	11.839	0	0
Hex3HexNAc6dHex1	44.831	1868.7032	1868.71035	H-	0	4.720	0	0
Hex4HexNAc6	45.859	1884.6981	1884.6959	H+	0	12.977	0	0
Hex2HexNAc4Neu5Ac2dHex1	45.833	1900.693	1900.69272	H-	0	0	0	59.910
Hex8HexNAc3	44.958	1923.6711	1923.67971	H-	0	70.971	0	0
Hex5HexNAc4Neu5Ac1	44.692	1931.6875	1931.68674	H+	0	0	0	10.964
Hex5HexNAc4dHex2	45.514	1932.7079	1932.7053	H+	0	0	0	20.227
Hex5HexNAc3Neu5Ac2	44.73	2019.7035	2019.70576	H-	0	382.077	0	0
Hex5HexNAc3Neu5Ac1dHex2	45.327	2020.7239	2020.72275	H+	0	69.863	0	0
Hex5HexNAc3Neu5Ac2	45.708	2037.7141	2037.72378	H-	0	21.076	0	0
Hex2HexNAc4Neu5Ac3	46.005	2045.7303	2045.73477	H-	0	0	0	12.824
Hex5HexNAc6	46.469	2046.7509	2046.7565	H-	0	0	0	6.288
Hex7HexNAc3dHex2	45.706	2071.7446	2071.74063	H-	0	8.333	0	0
Hex5HexNAc4Neu5Ac1dHex1	44.947	2077.7454	2077.74131	H+	0	24.927	0	3.561
Hex5HexNAc4dHex3	46.265	2078.7659	2078.7731	H-	0	12.280	0	0
Hex5HexNAc4Neu5Ac1dHex1	45.335	2095.7561	2095.74831	H-	0	0	0	40.010
Hex7HexNAc4dHex1	45.31	2110.7556	2110.76401	H+	0	0	0	12.537
Hex6HexNAc5dHex1	45.777	2151.7822	2151.78579	H-	0	21.309	0	0
Hex5HexNAc3Neu5Ac1dHex3	45.856	2166.7818	2166.78347	H-	0	0	0	53.354
Hex7HexNAc5	45.722	2167.7771	2167.77752	H-	0	21.030	0	14.045
Hex5HexNAc5Neu5Gc1	45.824	2168.7725	2168.78525	H+	0	0	0	11.828
Hex3HexNAc4Neu5Ac3	46.184	2189.7727	2189.78457	H-	0	0	0	25.562
Hex5HexNAc6dHex1	47.052	2192.8088	2192.81156	H-	0	16.575	0	0
Hex4HexNAc6dHex2	47.043	2194.8245	2194.81973	H-	0	4.176	0	0

Hex5HexNAc4Neu5Ac2	44.824	2222.783	2222.78565	H-	0	104.510	0	17.489
Hex5HexNAc4Neu5Gc2	46.149	2254.7727	2254.75933	H-	0	18.650	0	20.551
Hex4HexNAc5Neu5Ac2	46.822	2263.8096	2263.81094	H-	0	16.995	0	0
Hex3HexNAc8dHex1	46.582	2274.8621	2274.86997	H+	0	0	0	59.939
Hex6HexNAc5dHex2	46.438	2297.8401	2297.84317	H-	0	32.518	0	0
Hex7HexNAc5dHex1	46.357	2313.835	2313.8398	H-	0	66.931	0	0