

Supplemental Table 1: Linear models were performed to determine the association between fasting plasma glucose, fasting plasma insulin, HOMA-IR and ISI at 30 weeks gestation and HMO concentrations in human milk at 2M postpartum after controlling for maternal gestational weight gain, maternal age, maternal race, maternal BMI, delivery mode and infant sex.

Maternal Glucose Metabolism	HMO	Secretor status	Model A ¹		Model B ²		Model C ³		Model D ⁴	
Glucose	3'SL	NS	-87.735	0.034	-79.262	0.075	NC		NC	
Glucose	LNT	NS	578.540	0.054	655.860	0.045	NC		NC	
Glucose	DFLNT	NS	-152.992	0.235	NC		NC		-210.67	0.093
Glucose	LNH	NS	95.117	0.135	NC		NC		121.689	0.049
Glucose	Fucosylated	NS	-919.137	0.177	NC		NC		-1,312.37	0.045
Insulin	LNFP III	NS	-0.042	0.056	-0.038	0.103	NC		NC	
Insulin	FDSL NH	NS	-0.371	0.051	NC		-0.329	0.140	NC	
Insulin	Sum	NS	1.280	0.021	NC		1.031	0.106	NC	
Insulin	Sialylated	NS	-0.807	0.062	NC		-0.814	0.112	NC	
ISI	Diversity	NS	11.300	0.060	13.662	0.037	NC		NC	
ISI	LNnT	NS	561.048	0.134	720.213	0.072	NC		NC	
ISI	Sum	NS	-7,770.20	0.084	NC		-6,796.69	0.133	NC	
ISI	LNT	NS	6,560.120	0.098	NC		6,525.13	0.107	NC	
ISI	DFLac	S	835.425	0.056	589.976	0.247	NC		NC	
ISI	LNFP II	S	2,734.199	0.064	4,088.825	0.019	NC		NC	
ISI	LSTb	S	-313.351	0.017	-207.077	0.176	NC		NC	
ISI	FDSL NH	S	575.621	0.106	724.105	0.086	599.101	0.094	NC	
HOMA-IR	DFLac	S	-71.902	0.046	-61.270	0.101	NC		-70.480	0.052

¹Adjusting for maternal gestational weight gain, maternal age, and maternal race

²Adjusting for maternal gestational weight gain, maternal age, maternal race and maternal BMI

³Adjusting for maternal gestational weight gain, maternal age, maternal race and delivery mode

⁴Adjusting for maternal gestational weight gain, maternal age, maternal race and infant sex

HOMA-IR: Homeostasis Model Assessment of Insulin Resistance, ISI: Insulin Sensitivity Index, NC: No Change from Model 1, NS: Non-secretor, S: Secretor,