

Pregnancy samples	MGE			
Race	White	Non-white	p-value	
Sum of abundance	0.09 (0.03 - 0.28)	4×10^{-4} (3×10^{-5} - 0.03)	0.003*	
Richness	11 (7 - 14)	4 (2.5 - 8.5)	0.035*	
Shannon Index	0.64 (0.16 - 1.18)	0.87 (0.51 - 1.18)	0.909	
Inverse Simpson Index	1.71 (1.06 - 2.77)	2.29 (1.38 - 3.05)	0.546	
Parity	1-2 children	>3 children	p-value	
Sum of abundance	0.06 (0.0026 - 0.21)	0.14 (0.09 - 0.25)	0.074†	
Richness	9.5 (6 - 13)	11 (9.25 - 15)	0.185	
Shannon Index	0.72 (0.28 - 1.24)	0.26 (0.10 - 1.09)	0.409	
Inverse Simpson Index	1.73 (1.13 - 2.87)	1.14 (1.03 - 2.76)	0.382	
Smoking	Never	Ever	p-value	
Sum of abundance	0.07 (0.02 - 0.22)	0.11 (0.007 - 0.29)	0.557	
Richness	11 (6.5 - 12.5)	10 (5.3 - 13)	0.936	
Shannon Index	0.68 (0.16 - 1.23)	0.66 (0.20 - 1.15)	0.866	
Inverse Simpson Index	1.73 (1.07 - 2.78)	1.6 (1.08 - 2.91)	0.788	
Pre-Pregnancy BMI	Normal or underweight	Overweight	Obese	p-value
Sum of abundance	0.17 (0.05 - 0.32)	0.07 (0.001 - 0.15)	0.03 (0.004 - 0.15)	0.279
Richness	11.5 (7 - 13)	10 (4 - 14)	8 (5.5 - 12)	0.525
Shannon Index	0.63 (0.17 - 1.34)	0.75 (0.26 - 1.07)	0.71 (0.24 - 1.21)	0.967
Inverse Simpson Index	1.59 (1.06 - 3.03)	1.87 (1.13 - 2.71)	1.73 (1.11 - 2.82)	0.973

Infancy samples	MGE		
Sex	Female	Male	p-value
Sum of abundance	0.21 (0.12 - 0.79)	0.27 (0.07 - 0.52)	0.512
Richness	14 (13 - 15)	15 (12 - 16)	0.694
Shannon Index	1.23 (0.76 - 1.35)	1.32 (0.36 - 1.62)	0.819
Inverse Simpson Index	2.7 (1.94 - 3.04)	3.04 (1.17 - 3.96)	0.588
Delivery mode	C-section	Vaginal	p-value
Sum of abundance	0.36 (0.15 - 0.92)	0.20 (0.08 - 0.61)	0.361
Richness	15 (12.5 - 16)	14 (12 - 15)	0.439

Shannon Index	1.32 (0.35 - 1.75)	1.23 (0.75 - 1.47)	0.439
Inverse Simpson Index	3.04 (1.16 - 4.71)	2.73 (1.74 - 3.65)	0.439
Breastmilk percentage	<50%	≥50%	p-value
Sum of abundance	0.19 (0.09 - 0.44)	0.31 (0.08 - 0.79)	0.455
Richness	14 (12.5 - 16)	14 (12 - 15)	0.746
Shannon Index	1.21 (0.35 - 1.63)	1.24 (0.75 - 1.49)	0.912
Inverse Simpson Index	2.7 (1.15 - 3.95)	2.82 (1.74 - 3.67)	1
Diet	No solid food	Solid food	p-value
Sum of abundance	0.38 (0.27 - 0.54)	0.25 (0.08 - 0.79)	0.515
Richness	14.5 (13.5 - 15.3)	14 (13 - 16)	0.814
Shannon Index	1.26 (0.67 - 1.51)	1.28 (0.51 - 1.54)	0.986
Inverse Simpson Index	2.62 (1.76 - 3.89)	3.01 (1.38 - 3.75)	0.986

* = p values \leq 0.05

† = p values (0.05 - 0.1)