

Supplementary table

Table S1. Unified metadata categories and sample numbers of MSE 2 microbiome database.

Habitat domain	Habitat type	# of samples	Rate
Human associated	Gut	85,615	34.21%
Human associated	Skin	22,714	9.08%
Human associated	Oral	16,039	6.41%
Human associated	Other body site	4,951	1.98%
Human associated	Urogenital	2,293	0.92%
Human associated	Nose	596	0.24%
Animal associated	Mammal animal	42,380	16.93%
Animal associated	Non-mammal animal	16,839	6.73%
Environment	Soil	15,998	6.39%
Environment	Building	14,375	5.74%
Environment	Marine	6,718	2.68%
Environment	Lake	4,242	1.69%
Environment	Other environment	4,131	1.65%
Environment	Plant	3,697	1.48%
Environment	Freshwater	3,486	1.39%
Environment	River	2,251	0.90%
Environment	Milk	1,636	0.65%
Environment	Food	1,344	0.54%
Environment	Sand	968	0.39%