

SUPPORTING INFORMATION

Urinary metabolomic profile of preterm infants receiving human milk with either bovine- or donkey milk-based fortifiers

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Table S1. Macronutrient composition of the multi-component fortifiers and the protein concentrates derived from either bovine milk (B-HMF) or donkey milk (D-HMF). Values per 100 g of product.

	B-HMF	D-HMF
<i>Multicomponent fortifier</i>		
Protein g (Nx6.25)	20.0	22.5
Carbohydrate g	66.0	59.0
of which:		
Lactose g	6.0	59.0
Maltodextrin g	60.0	0.0
Fat g	0.4	3.6
Energy:		
Kcal	385	390
kcal/g protein	18.8	15.6
Calcium mg	1500	938
Phosphate mg	900	734
Osmolality mOsm/Kg	453	441
<i>Protein concentrate</i>		
Protein g (Nx6.25)	88.5	43.0
Carbohydrate g	<1.5	33.5
Fat g	≤2.0	6.1
Energy:		
Kcal	370	418
kcal/g protein	4.2	9.7
Calcium mg	1350	1650
Phosphate mg	700	1150

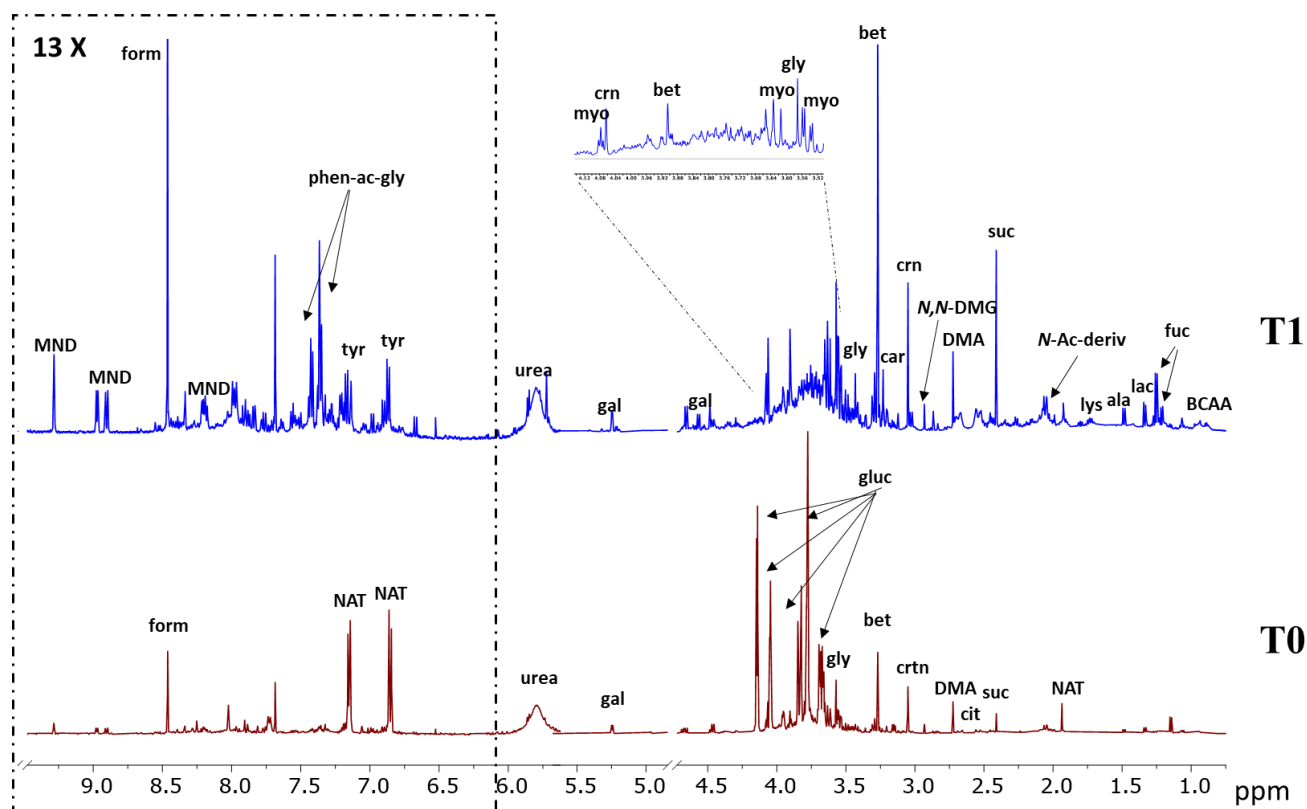


Figure S1. Representative ¹H NMR spectra of preterm infant urine collected before (T0) and after 21 days of ADJ fortification (T1). Abbreviations: ac, acetic acid; ala, alanine; BCAA, branched-chain amino acids; bet, betaine; car, carnitine; cit, citric acid; crn, creatinine; DMA, dimethylamine; form, formic acid; fuc, fucose; gal, galactose; gly, glycine; gluc, gluconate; lac, lactate; lys, lysine; myo, myo-inositol; MND, 1-methylnicotinamide, *N*-Ac-deriv, *N*-acetyl derivatives; NAT, *N*-acetyltyrosine; *N,N*-DMG, *N,N*-dimethylglycine; phen-ac-gly, phenylacetyl glycine; suc, succinic acid; tyr, tyrosine.

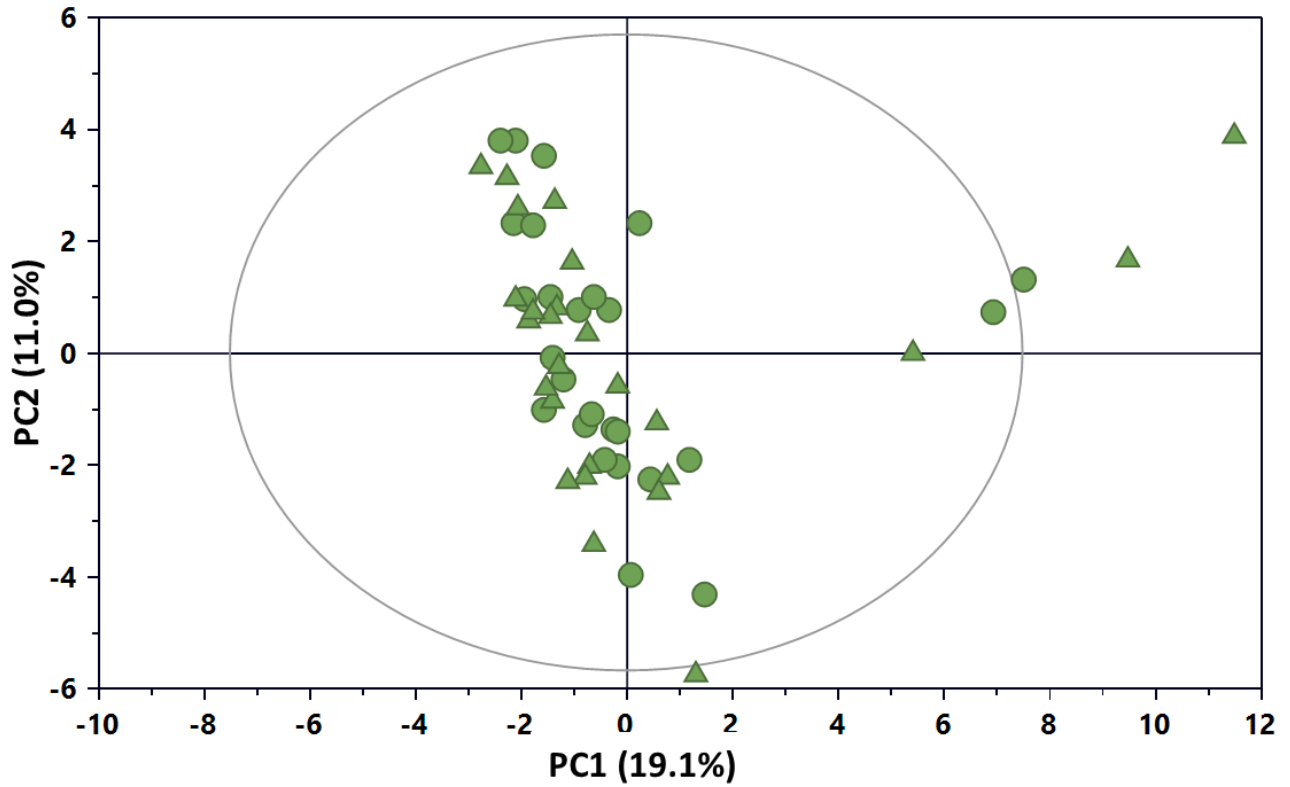


Figure S2. PC1 vs PC2 scores plot of the PCA model built with urine samples collected from preterm infants before ADJ fortification: o, B-HMF (infants receiving commercial multicomponent fortifier and protein concentrate derived from bovine milk); $\triangle$, D-HMF (infants receiving experimental multicomponent fortifier and protein concentrates derived from donkey milk) ($R^2X=0.310$; $Q^2=0.201$).