Table S1: Regression models for the total dataset (n = 391) and the subsets piglet (n = 49), pig (n = 232) and sow (n = 110) with coefficients of determination (R^2) and RMSE (significance level for all regressions $p < 0.001$).

Nutrient	Subset	Equation	RMSE	R^2
AN	All	y = 0.48 + 0.82QV	0.264	0.92
	All	y = 0.41 + 0.08EC	0.614	0.55
	Piglet	y = 0.41 + 0.81QV	0.198	0.91
	Piglet	y = 0.28 + 0.07EC	0.366	0.70
	Pig	y = 0.63 + 0.78QV	0.282	0.87
	Pig	y = 1.16 + 0.06EC	0.645	0.63
	Sow	y = 0.50 + 0.77QV	0.220	0.87
	Sow	y = 0.29 + 0.07EC	0.401	0.40
TN	All	y = 0.52 + 1.39QV	0.569	0.87
	All	y = 1.87 + 0.49DM	0.847	0.72
	All	y = 0.59 + 0.99QV + 0.23DM	0.341	0.95
	Piglet	y = 0.34 + 1.58QV	0.456	0.88
	Piglet	y = 1.35 + 0.55DM	0.645	0.76
	Piglet	y = 0.35 + 1.08QV + 0.28DM	0.162	0.98
	Pig	y = 0.55 + 1.38QV	0.613	0.82
	Pig	y = 2.48 + 0.43DM	0.808	0.69
	Pig	y = 0.72 + 0.97QV + 0.22DM	0.381	0.93
	Sow	y = 0.59 + 1.30QV	0.488	0.80
	Sow	y = 1.53 + 0.42DM	0.612	0.68
	Sow	y = 0.61 + 0.91QV + 0.24DM	0.262	0.94
TP	All	y = −0.06 + 0.21DM	0.213	0.88
	All	y = −45.99 + 45.79SG	0.344	0.69
	Piglet	y = −0.08 + 0.20DM	0.153	0.88
	Piglet	y = −43.65 + 43.49SG	0.193	0.81
	Pig	y = −0.09 + 0.21DM	0.214	0.89
	Pig	y = −47.84 + 47.58SG	0.361	0.68
	Sow	y = −0.05 + 0.23DM	0.214	0.84
	Sow	y = −45.78 + 45.62SG	0.356	0.56
TK	All	y = 0.64 + 0.77QV	0.538	0.70
	All	y = 0.25 + 0.09EC	0.633	0.58
	Piglet	y = 0.49 + 0.89QV	0.463	0.69
	Piglet	y = 0.15 + 0.09EC	0.477	0.67
	Pig	y = 0.97 + 0.67QV	0.574	0.56
	Pig	y = 0.85 + 0.07EC	0.651	0.43
	Sow	y = 0.65 + 0.63QV	0.394	0.58
	Sow	y = 0.38 + 0.06EC	0.447	0.46

QV (kg m^{-3}), EC (mS cm^{-1}), DM (%), SG (g cm^{-3})

AN = Ammonium nitrogen, TN = Total nitrogen, TP = Total phosphorus, TK = Total potassium, DM = Dry matter, SG = Specific gravity, EC = Electrical conductivity, QV = Quantofix-N-Volumeter.