

**S2 Table.** Validation 1: correlation between measured osmolality increase (i.e. measurements using a freezing point device) and predicted osmolality increase (i.e. calculations from the prediction equations) on single macronutrient. Graphs on carbohydrates (glucose polymer), protein 1 (whey protein), protein 2 (hydrolyzed protein), and fat

Validation on prediction

Polyose g/100mL	Measured osmolality increase mOsm/kg	Predicted osmolality increase mOsm/kg
0.800	17	16
0.803	13	16
0.802	20	16
0.814	19	16
0.798	7	16
1.596	32	31
1.604	26	31
1.604	31	31
1.604	37	31
1.603	27	31

  

Beneprotein (Protein 1) g/100mL	Measured osmolality increase mOsm/kg	Predicted osmolality increase mOsm/kg
0.396	1	0
0.403	1	0
0.393	1	0
0.402	4	0
0.393	2	0
1.632	8	7
1.619	7	7
1.617	9	7
1.586	12	6
1.573	7	6

  

Aptamil/Protein 2 g/100mL	Measured osmolality increase mOsm/kg	Predicted osmolality increase mOsm/kg
0.467	19	17
0.410	14	15
0.401	15	15
0.404	14	15
0.408	19	15
1.652	65	62
1.580	60	60
1.600	58	60
1.609	59	61
1.636	57	62

  

Lipid ml/100mL	Measured osmolality increase mOsm/kg	Predicted osmolality increase mOsm/kg
0.8	5	1
0.8	-1	1
0.8	-3	1
0.8	4	1
0.8	-2	1
3.2	-1	-2
3.2	-3	-2
3.2	-4	-2
3.2	-4	-2
3.2	-2	-2