

Table 4. Analysis of ten oral electrolytes solutions commercially available in New Zealand

	Mixing rate	Glucose + Lactose Energy (MJ/L)	Sodium (mM/L)	Potassium (mM/L)	Chloride (mM/L)	Amino acid	SID	Osmolality (mOsm/L)	Alkalinizing agent (mM/L)	Glucose:Na ratio	Prebiotics Probiotics Starch	Comments
<b>Recommendations</b>			<b>90-130</b>	<b>10 - 30</b>	<b>40 - 80</b>	<b>Glycine</b>	<b>60-80</b>	<b>400-600</b>	<b>Acetate 50 - 60</b>	<b>1:1-3:1</b>		
<b>Biocalf Plus</b>	130g/2L	0.79	128	27	78	Glycine L- Alanine	76	495	Bicarbonate 20mM/L Acetate 24mM/L Citrate 6mM/L <b>Total: 50</b>	1.5:1	Probiotics. Prebiotic yeast. Guar gum	A superior oral electrolyte with additional benefits from a prebiotic, probiotic and gelling agent gaur gum – contains a mix of glucose and lactose
<b>Revive</b>	118g/2L	0.75	146	31	103	L- Alanine	74	517	Bicarbonate 17mM/L Acetate 30mM/L Citrate 4mM/L <b>Total: 51</b>	1.2:1		A superior oral electrolyte solution for use in calves – contains a mx of glucose and lactose.
<b>Diarrest</b>	248.5g/L	1.84	146	31	103	L- Alanine	74	517	Bicarbonate 17mM/L Acetate 30mM/L Citrate 4mM/L <b>Total: 51</b>	1.2:1	Rice flour Starch	A very good oral electrolyte with additional benefits from slow release carbohydrates, rice flour and starch – contains a mx of glucose and lactose.
<b>Biocalf Restore</b>	50g/L	0.65	117	27	78	Glycine	65	440	Acetate 36mM/L Citrate 9mM/L <b>Total: 45</b>	1.6:1	None	An excellent electrolyte with a good balance of energy, essential salts and alkalinizing agents
<b>Novolyte</b>	50g/L	0.67	112	24	68	None	68	455	Citrate 9mM/L Acetate 30mM/L Propionate 13mM/L <b>Total: 52</b>	1.7:1		An excellent electrolyte with a good balance of energy and essential salts and alkalinizing agents.
<b>Enerlect</b>	50g/L	0.67	68	21	53	Glycine	36	397	Bicarbonate 14mM/L Citrate 7mM/L <b>Total: 21</b>	3.4:1		Sodium and alkalinizing agent levels too low – would not be a good choice for treating diarrhoea.
<b>Vet electrolyte</b>	56g/L	0.72	140	10	109	None	41	512	Citrate 19mM/L Lactate 3mM/L <b>Total: 21</b>	1.6:1		An adequate electrolyte but a high chloride level – low level of alkalinizing agents

<b>Dexolyte</b>	80g/2L	0.52	44	14	59	None	0	301	None	4.1:1		Only suitable as an energy boost for stressed calves – Low osmolality - Low in sodium and no alkalinizing agent – could increase the risk for osmotic diarrhoea - would not be a good choice for calves with diarrhoea
<b>Enervade</b>	70g/2L	0.32	80	14	58	Glycine	36	327	Bicarbonate 26mM/L <b>Tot: 26</b>	1.8:1	Prebiotic	Sodium + glycine total higher than glucose. OK electrolyte but not ideal
<b>Diaproof K</b>	100g/2L	0.26	87	14	46		69	270	Bicarbonate 34mM/L Citrate 5mM/L <b>Total: 39</b>	1:1	Mucopoly-saccharide	Very low osmolality – Low in glucose and sodium - low to adequate bicarbonate to help with acidosis – mucopolysaccharide may provide slow release energy.
<b>Nutricare</b>	80g/2L	0.38	205	22	145	Glycine	81	542	Bicarbonate 14mM/L Citrate 1mM/L <b>Total: 15</b>	0.6:1		A very high level of sodium and chloride which can cause Sodium toxicity in calves – low ratio of glucose+glycine to sodium to facilitate sodium absorption - minimal alkalinizing ability - should be avoided for treatment of diarrhoea.
<b>Vytrate</b>	64g/2L	0.40	73	18	73	Glycine	18	330	None	2.1:1		Low concentration of ingredients - suitable as a first feed for bought -in or stressed calves – no alkalinizing agent

*This listing does not include every product available in NZ. No discrimination or specific endorsement of any product is intended.*

*Disclaimer: The information for this table was obtained from suppliers published data or product labels and, in some cases, there was insufficient information available to provide an exact calculation so values may not be completely accurate.*

*No liability is inferred from information pertaining to the choice or use of any products listed in the table. E&OE.*

*Note, it is important to consult with your Veterinarian to select the most appropriate product to optimize your calf treatment protocols.*