ORLANDO HEALTH GUIDELINE
CREATING ISOTONIC AND HYPERTONIC ADULT TUBE FEEDING SOLUTIONS

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Isotonic and hypertonic tube feeding solutions are commonly utilized to reduce free water administration, treat hyponatremia, or raise serum osmolarity. The tables below illustrate the amount of salt needed to make various tube feeding solutions either isotonic or hypertonic.

ISOTONIC TUBE FEEDING (0.9% NaCl)

Product	Sodium Content mg (mEq) / L	Sodium needed (to total 3569 mg/L)	Number of teaspoons of sodium chloride to add per LITER	Number of teaspoons of sodium chloride to add per 500 mL
Glucerna 1.2	1110 (48)	2459	1¼	¾
Glucerna 1.5	1380 (60)	2189	1	½
Jevity 1.0	930(40)	2639	1 ¼	¾
Jevity 1.2	1350 (59)	2219	1	½
Jevity 1.5	1400 (61)	2169	1	½
Nepro	1060 (46)	2509	1½	½
Nutrihep	160 (7)	3409	1¾	¾
Optimental	1055 (46)	2514	1¼	¾
Osmolite 1.0	930(4)	2639	1 ¼	¾
Osmolite 1.2	1340 (58)	2229	1	½
Osmolite 1.5	1400 (61)	2169	1	½
Oxepa	1310 (57)	2259	1	½
Peptamen 1.5	1020 (44)	2549	1¼	¾
Pulmocare	1310 (57)	2259	1	½
Suplena	802 (35)	2767	1½	¾
TwoCal HN	1450 (64)	2119	1	½
Vivonex RTF	670 (29)	2899	1½	¾

HYPERTONIC TUBE FEEDING (1.5% NaCl)

Product	Sodium Content mg (mEq) / L	Sodium needed (to total 5948 mg/L)	Number of teaspoons of sodium chloride to add per LITER	Number of teaspoons of sodium chloride to add per 500 mL
Glucerna 1.2	1110 (48)	4838	2½	1¼
Glucerna 1.5	1380 (60)	4560	2¼	1
Jevity 1.0	930 (40)	5018	2 ½	1 ¼
Jevity 1.2	1350 (59)	4598	2¼	1
Jevity 1.5	1400 (61)	4548	2¼	1
Nepro	1060 (46)	4888	2½	1¼
Nutrihep	160 (7)	5788	3	1½
Optimental	1055 (46)	2514	2½	1¼
OSmolite 1.0	930 (40)	5018	2 ½	1 ¼
Osmolite 1.2	1340 (58)	4608	2¼	1
Osmolite 1.5	1400 (61)	4548	2¼	1
Oxepa	1310 (57)	2259	2½	1
Peptamen 1.5	1020 (44)	4928	2½	1¼
Pulmocare	1310 (57)	4638	2¼	1
Suplena	802 (35)	5146	2¾	1½
TwoCal HN	1450 (64)	4498	2½	1¼
Vivonex RTF	670 (29)	5278	2¾	1½

FORMULAS/CONVERSIONS

Molecular weight Sodium (Na^+) = 23 Chloride (Cl^-) = 35 Sodium chloride (NaCl) = 58	**Isotonic solutions (0.9%)** NaCl = 9000 mg/L (154 mEq/L) Na = 3569 mg/L (154 mEq/L)
Converting mEq to mg 1 mEq Na = 23mg 1 mEq Cl = 35mg 1 mEq NaCl = 58 mg	**Hypertonic solutions (1.5%)** NaCl = 15000 mg/L (257 mEq/L) Na = 5948 mg/L (257 mEq/L)
Teaspoon conversions 1 teaspoon NaCl = 5000 mg NaCl 1 teaspoon NaCl = 1983 mg Na	