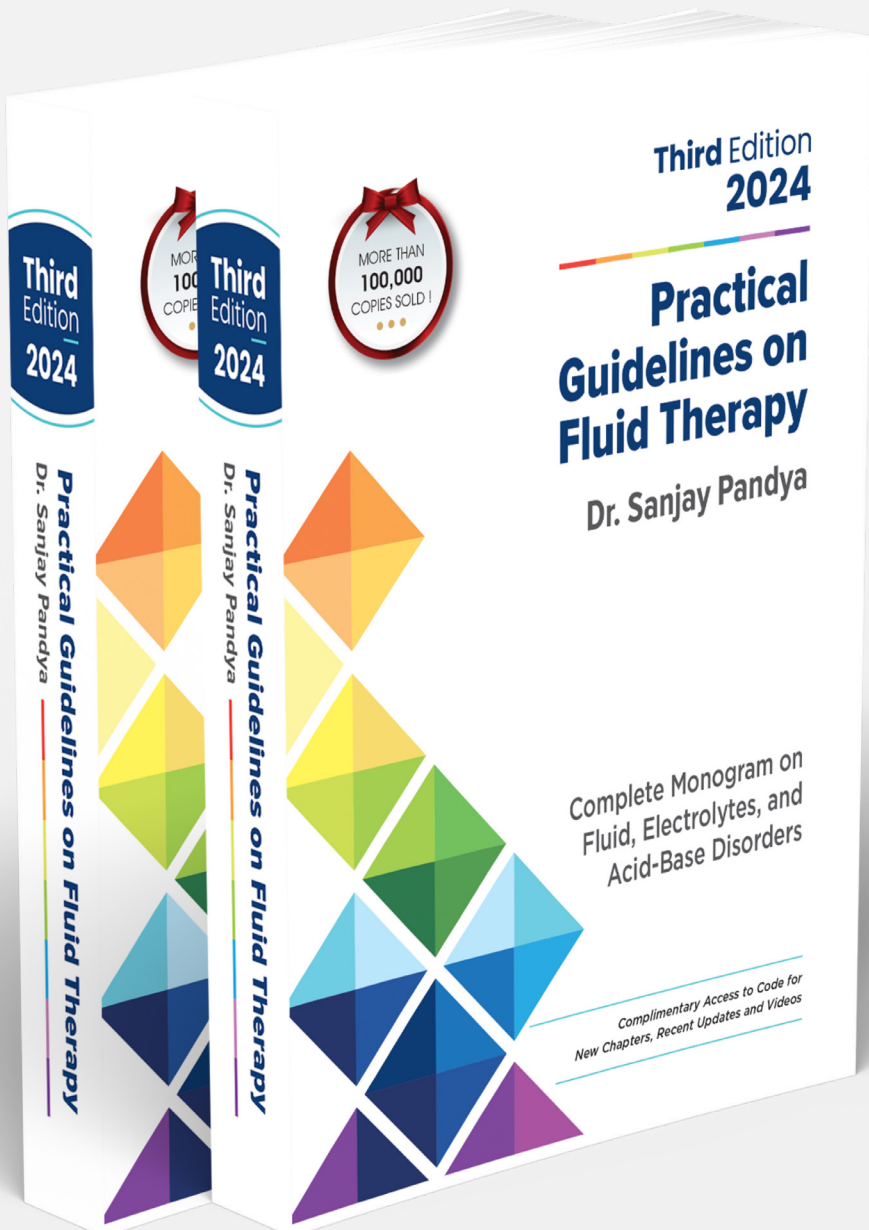




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## Chapter 10:

Calcium Gluconate, Calcium Chloride, and Hypertonic Dextrose Solutions



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# 10

## Calcium Gluconate, Calcium Chloride, and Hypertonic Dextrose Solutions

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Commonly used special solutions are calcium chloride, calcium gluconate, dextrose 25% and 50%, hypertonic saline, magnesium sulfate, potassium chloride, potassium phosphate, and sodium bicarbonate (Table 10.1).

**Table 10.1 Composition of commonly used special solutions**

<b>Injection</b>	<b>Content in mEq/ml</b>	<b>Volume of amp (mL)</b>	<b>Content in mEq/amp</b>	<b>gm/10 ml amp</b>
Calcium gluconate 10%	Ca <sup>2+</sup> = 0.45	10	Ca <sup>2+</sup> = 4.5/10 ml	1.0
Calcium chloride 10%	Ca <sup>2+</sup> = 1.36	10	Ca <sup>2+</sup> = 13.6/10 ml	1.0
Hypertonic (3%) saline	Na <sup>+</sup> = 0.5	100	Na <sup>+</sup> = 51/100 ml	3.0
Magnesium sulfate 50%	Mg <sup>2+</sup> = 4	2.0	Mg <sup>2+</sup> = 8/2 ml	1.0
Potassium chloride 15%	K <sup>+</sup> = 2.0	10	K <sup>+</sup> = 20/10 ml	1.5
Potassium phosphates	K <sup>+</sup> = 4.4 PH <sub>4</sub> = 3.0	15	K <sup>+</sup> = 66/15 ml PH <sub>4</sub> = 45/15 ml	-
7.5% NaHCO <sub>3</sub>	HCO <sub>3</sub> <sup>-</sup> = 0.9	10	HCO <sub>3</sub> <sup>-</sup> = 9/10 ml	0.75
8.4% NaHCO <sub>3</sub>	HCO <sub>3</sub> <sup>-</sup> = 1.0	20	HCO <sub>3</sub> <sup>-</sup> = 10/10 ml	0.84

HCO<sub>3</sub><sup>-</sup>: Bicarbonate; Ca<sup>2+</sup>: Calcium; Mg<sup>2+</sup>: Magnesium; PH<sub>4</sub>: Phosphate; K<sup>+</sup>: Potassium; Na<sup>+</sup>: Sodium; NaHCO<sub>3</sub>: Sodium bicarbonate

## **INJECTION CALCIUM GLUCONATE AND CALCIUM CHLORIDE**

Inj. calcium gluconate and calcium chlo-

ride are two different salt forms commonly used in various emergency conditions.

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